

EXHIBIT 3

<p style="text-align: right;">Page 1</p> <p>1 IN PRIVATE ARBITRATION</p> <p>2 BEFORE THE HON. GARY P. CARUSO</p> <p>3 ----- x</p> <p>4 PITTSBURGH WATER AND SEWER :</p> <p>5 AUTHORITY, :</p> <p>6 Claimant, : Cause No.</p> <p>7 v. : 43-3010-0352</p> <p>8 VEOLIA WATER NORTH AMERICA :</p> <p>9 NORTHEAST, LLC, :</p> <p>10 Respondent and :</p> <p>11 Counterclaimant. :</p> <p>12 ----- x</p> <p>13</p> <p>14 Deposition of VEOLIA WATER NORTH AMERICA</p> <p>15 NORTHEAST, LLC,</p> <p>16 By and through its Designated Representative</p> <p>17 MARVIN GNAGY</p> <p>18 Pittsburgh, Pennsylvania</p> <p>19 Wednesday, December 6, 2017</p> <p>20 9:28 a.m.</p> <p>21</p> <p>22</p> <p>23 Job No.: 167523</p> <p>24 Pages: 1 - 93</p> <p>25 Reported By: Amelia Bowlen, FAPR, RDR, CRR, CRC</p>	<p style="text-align: right;">Page 3</p> <p>1 A P P E A R A N C E S</p> <p>2 ON BEHALF OF THE CLAIMANT:</p> <p>3 JORDAN M. WEBSTER, ESQUIRE</p> <p>4 BUCHANAN INGERSOLL ROONEY PC</p> <p>5 One Oxford Centre, 20th Floor</p> <p>6 301 Grant Street</p> <p>7 Pittsburgh, Pennsylvania 15219</p> <p>8 (412)392-1667</p> <p>9</p> <p>10 ON BEHALF OF THE RESPONDENT AND</p> <p>11 COUNTERCLAIMANT:</p> <p>12 ROBERT A. GALLAGHER, ESQUIRE</p> <p>13 PEPPER HAMILTON LLP</p> <p>14 500 Grant Street, 50th Floor</p> <p>15 Pittsburgh, Pennsylvania 15219</p> <p>16 (412)454-5000</p> <p>17</p> <p>18 ALSO PRESENT:</p> <p>19 FRANCIS X. FERRARA, ESQUIRE</p> <p>20 Veolia North America</p> <p>21 Senior Vice President and Deputy</p> <p>22 General Counsel</p> <p>23 120 Water Street, Suite 212</p> <p>24 North Andover, Massachusetts 01845</p> <p>25 (978)725-0050</p>
<p style="text-align: right;">Page 2</p> <p>1 Deposition of MARVIN GNAGY, held at the offices</p> <p>2 of:</p> <p>3</p> <p>4</p> <p>5 PEPPER HAMILTON LLP</p> <p>6 50th Floor</p> <p>7 500 Grant Street</p> <p>8 Pittsburgh, Pennsylvania 15219</p> <p>9 (412)454-5000</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14 Pursuant to notice, before Amelia Bowlen,</p> <p>15 Registered Diplomat Reporter, Certified Realtime</p> <p>16 Reporter, and Notary Public in and for the</p> <p>17 Commonwealth of Pennsylvania.</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	<p style="text-align: right;">Page 4</p> <p>1 C O N T E N T S</p> <p>2</p> <p>3 EXAMINATION OF MARVIN GNAGY PAGE</p> <p>4 By Mr. Webster 7</p> <p>5</p> <p>6</p> <p>7 E X H I B I T S</p> <p>8 (Attached to transcript.)</p> <p>9 GNAGY DEPOSITION EXHIBIT PAGE</p> <p>10 1 Objections and Responses to Claimant's 9</p> <p>11 Notice of Deposition of Veolia Water</p> <p>12 North America - Northeast, LLC</p> <p>13 2 8/22/12 Memorandum Prepared by Marvin 11</p> <p>14 Gnagy, Veolia 13455 - 13462</p> <p>15 3 Compilation of 10 Weekly Summary of 16</p> <p>16 Activities documents generated by</p> <p>17 Marvin Gnagy</p> <p>18 4 EPA National Primary Drinking Water 23</p> <p>19 Regulations</p> <p>20 5 6/17/14 - 6/18/14 E-mail chain between 30</p> <p>21 Marvin Gnagy and Chris Westbrook,</p> <p>22 Veolia 199043 - 199048</p> <p>23 6 2/22/16 - 2/23/16 E-mail chain, 39</p> <p>24 Veolia 201204 - 201208</p> <p>25</p>

<p style="text-align: right;">Page 5</p> <p>1 EXHIBITS CONTINUED</p> <p>2 GNAGY DEPOSITION EXHIBIT PAGE</p> <p>3 7 2/25/16 - 2/26/16 E-mail chain, 46</p> <p>4 Veolia 230513 - 230514</p> <p>5 8 Packet of e-mail and reports, 52</p> <p>6 Veolia 191104 - 191208</p> <p>7 9 8/1/13 E-mail chain, 54</p> <p>8 Veolia 209237 - 209239</p> <p>9 10 9/30/13 E-mail from Gina Cyprych, 59</p> <p>10 Veolia 195727</p> <p>11 11 PWSA 2013 Annual Drinking Water Quality 66</p> <p>12 Report, Veolia 87514 - 87523</p> <p>13 12 February 2013 Technical Memorandum, 81</p> <p>14 Veolia 9379 - 9390</p> <p>15 13 March 2013 Technical Memorandum, 83</p> <p>16 Veolia 12192 - 12203</p> <p>17 14 April 2013 Technical Memorandum 85</p> <p>18 15 June 2013 Technical Memorandum, 88</p> <p>19 Veolia 15323 - 15335</p> <p>20 16 November 2013 Technical Memorandum, 88</p> <p>21 Veolia 22784 - 22788</p> <p>22 17 December 2013 Technical Memorandum, 88</p> <p>23 Veolia 24049 - 24060</p> <p>24</p> <p>25</p>	<p style="text-align: right;">Page 7</p> <p>1 PROCEEDING</p> <p>2 Whereupon,</p> <p>3 MARVIN GNAGY,</p> <p>4 being first duly sworn or affirmed to testify to the</p> <p>5 truth, the whole truth, and nothing but the truth,</p> <p>6 was examined and testified as follows:</p> <p>7 EXAMINATION BY COUNSEL FOR THE CLAIMANT</p> <p>8 BY MR. WEBSTER:</p> <p>9 Q Good morning.</p> <p>10 A Good morning.</p> <p>11 Q My name is Jordan Webster. I'm one of the</p> <p>12 attorneys representing the Pittsburgh Water and</p> <p>13 Sewer Authority in an arbitration currently pending</p> <p>14 between the PWSA and Veolia.</p> <p>15 MR. GALLAGHER: Jordan, I should note that</p> <p>16 Mr. Gnagy has a pretty bad case of bronchitis, so if</p> <p>17 he needs to take a break, I just ask for your</p> <p>18 indulgence.</p> <p>19 MR. WEBSTER: Sure, absolutely.</p> <p>20 Q Some real quick ground rules. Have you been</p> <p>21 deposed before, sir?</p> <p>22 A Yes, I have.</p> <p>23 Q This is probably, then, repetitive in some</p> <p>24 respects but a couple things. All your answers need</p> <p>25 to be verbal --</p>
<p style="text-align: right;">Page 6</p> <p>1 EXHIBITS CONTINUED</p> <p>2 GNAGY DEPOSITION EXHIBIT PAGE</p> <p>3 18 April 2014 Technical Memorandum, 88</p> <p>4 Veolia 246544 - 246548</p> <p>5 19 May 2015 Technical Memorandum, 88</p> <p>6 Veolia 34400 - 34404</p> <p>7</p> <p>8</p> <p>9</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	<p style="text-align: right;">Page 8</p> <p>1 A Yes.</p> <p>2 Q -- so Amy here can take them down. No</p> <p>3 shrugs of the shoulders, shakes of the head. I will</p> <p>4 try to wait until you finish an answer before I</p> <p>5 start my next question. If you could wait until I</p> <p>6 finish my question before you start your answer,</p> <p>7 that will make her job much easier.</p> <p>8 If at any point in time you do not</p> <p>9 understand a question that I've asked, please let me</p> <p>10 know, and I'll do my best to restate it or rephrase</p> <p>11 it so that you and I are on the same page. If you</p> <p>12 proceed to answer a question that I've asked, I'm</p> <p>13 going to assume that you understood what I was</p> <p>14 talking about. Is that okay?</p> <p>15 A That's fine.</p> <p>16 Q I understand you've got an illness here, but</p> <p>17 are you taking any medication today or anything else</p> <p>18 that may affect your ability to listen to my</p> <p>19 question and give me your best answer?</p> <p>20 A I'm on prescription medication, but it</p> <p>21 doesn't impair me from answering questions.</p> <p>22 Q Any questions?</p> <p>23 A I do not have any questions.</p> <p>24 Q If you need to take a break, just let me</p> <p>25 know. The only caveat is if I've asked a question,</p>

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1 I'm going to ask you to answer the question before
 2 we take a break. Okay?
 3 A Understood.
 4 (Gnagy Deposition Exhibit 1 was marked
 5 for identification and is attached to the
 6 transcript.)
 7 Q This is Exhibit 1 to your deposition. Sir,
 8 this a copy of objections and responses to a
 9 deposition notice that your counsel, Mr. Gallagher,
 10 provided to us. If you turn to Page 2, Item 7, one
 11 of the topics that we had asked Veolia to present a
 12 witness to speak to on behalf of the company is
 13 Number 7, PWSA's water treatment plant operations
 14 including sourcing of chemicals. Do you see where I
 15 am?
 16 A Yes.
 17 Q And there was an objection, but then subject
 18 to and without waiving that objection, or those
 19 objections, Veolia designated you to address Topic
 20 7. Do you see that?
 21 A I do.
 22 Q And are you prepared today to speak to --
 23 speak on behalf of Veolia as to Topic Number 7?
 24 A Yes, I am.
 25 Q You can set that aside.

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1 THE WITNESS: Can you hear me?
 2 THE REPORTER: I can. I'll let you know if
 3 I can't. Thank you.
 4 Q Mr. Gnagy, tell me a little bit about your
 5 involvement on behalf of Veolia with PWSA. When did
 6 it start?
 7 A I believe it was August, about, 2012.
 8 Q Was there a particular purpose or objective
 9 for you beginning in August of 2012?
 10 A I was designated as a technical resource for
 11 water treatment operations.
 12 Q Did you have any role in preparing -- or any
 13 role in Veolia's due diligence efforts before it
 14 entered into a contract with PWSA?
 15 A I was not present during any due diligence
 16 efforts, no.
 17 Q Okay. Did you have -- separate and apart
 18 from whether you were physically present in
 19 Pittsburgh, did you have any role in reviewing
 20 documents or any due diligence efforts otherwise?
 21 A I do not recall reviewing documents or
 22 having any discussions before the contract was
 23 signed, no.
 24 Q Okay. Who asked you to come to Pittsburgh
 25 in August -- I guess, who asked you to get involved

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1 with PWSA in about August of 2012?
 2 A I received a call from Denny Tulenson.
 3 Q Who is Mr. Tulenson?
 4 A I believe he was -- I don't know what his
 5 official role was.
 6 Q Was he your boss?
 7 A No.
 8 Q Okay.
 9 A No. He was -- he was officially in the
 10 structuring department.
 11 Q Okay.
 12 A He may have had some involvement in the
 13 development of the RFP. I'm not sure. That would
 14 have been his job.
 15 Q What did he tell you when he called you?
 16 A Asked me to come in and meet with the plant
 17 staff and do an initial assessment of treatment
 18 plant operations and water quality.
 19 Q Okay. You prepared a memorandum as a result
 20 of that visit?
 21 A Yes, I did.
 22 Q Okay.
 23 (Gnagy Deposition Exhibit 2 was marked
 24 for identification and is attached to the
 25 transcript.)

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1 Q Sir, is this a copy of the memorandum you
 2 prepared as a result of your visit to Pittsburgh in
 3 August 2012?
 4 A It appears to be, yes.
 5 Q And it looks like you were in Pittsburgh for
 6 two days or at least parts of two days?
 7 A That's what I remember, yes.
 8 Q Okay. Did anybody from Veolia -- well, back
 9 up. Just generally describe for me what you did
 10 while you were in Pittsburgh for parts of two days
 11 in August of 2012.
 12 A First thing we did was requested and
 13 received a plant tour of the plant and grounds, had
 14 some discussion with the plant staff on how the
 15 plant was operated, what chemicals they used, what
 16 sequencing of the process they used, that kind of
 17 thing.
 18 Q Okay.
 19 A Later that day, then, we had a face-to-face
 20 meeting with Dr. States to discuss more details on
 21 water quality and his process control.
 22 Q Okay, and you lay out in your memorandum
 23 here, at least in a general sense, how PWSA was
 24 treating the water it was processing at the time,
 25 right?

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1 A I wrote down either what I was told by the
2 plant staff or Dr. States or what I had physically
3 observed in using my experience.

4 Q Okay. So to the best that you could
5 discern, the way they were operating at the time is
6 what you put in your memo?

7 A The best I could discern, yes.

8 Q Okay. After you -- back up a second. Did
9 you visit PWSA in August of 2012 with the
10 expectation that you would be involved in this
11 project on a continuing basis?

12 A That, I was not told.

13 Q You were just asked to go out for a couple
14 days and do an assessment?

15 A Yeah, I was asked to go out to do an
16 assessment of the plant and identify whether there
17 were any water quality issues or process things that
18 were not normal.

19 Q Okay.

20 A Or just to get a baseline of how the
21 operation was used to produce water.

22 Q After you prepared this memo and submitted
23 it, I see, to Mr. Tulenson here, when was the next
24 time you became involved or your next involvement in
25 this project?

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1 A I believe it was February of 2013.

2 Q And what happened in February 2013?

3 A I was asked to come in and start working on
4 some of the issues that had been identified.

5 Q Any issues in particular?

6 A THMs for one, membrane and plant operation,
7 number two.

8 Q Who asked you to do that?

9 A I don't recall. It would have been some of
10 the Veolia staff on site. I don't recall a specific
11 person.

12 Q Was your involvement in the PWSA project --
13 well, I've seen memos from you, I think, that
14 continue all of the way into 2015.

15 A Yes.

16 Q Does that mesh with your recollection?

17 A Yes.

18 Q Were you involved on a regular basis? Was
19 it case-by-case? I mean, how would you describe
20 your involvement over, I guess, a three-plus-year
21 period?

22 A I was involved approximately every two weeks
23 on site through a good portion of 2013.

24 Q Through 2013?

25 A Yes, and then through 2014, I don't remember

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1 exact time frames, but it might have been one trip a
2 month, and then in 2015, it was graduated down
3 further to maybe every two months.

4 Q So it was more intensive early on and then
5 tailed off as the project progressed?

6 A That's correct.

7 Q Is there a reason that you were involved
8 more in 2013 than in 2014 and 2015?

9 A That's what they requested of me. I do know
10 that some of the issues had already been
11 investigated and corrective actions implemented
12 during 2013.

13 Q Okay.

14 A So some of the laundry list of items we
15 identified had already been completed.

16 Q When you say you were on site every --
17 approximately every two weeks in 2013, did you
18 maintain calendars or anything like that that would
19 show you how often you were here?

20 A I have weekly reports that I send to my
21 supervisor, yes, with how many hours.

22 Q Okay.

23 A There's likely information on my calendar as
24 well, dates that I would have been scheduled for
25 PWSA.

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1 Q Did you keep -- when you refer to a

2 calendar, are you referring to an electronic
3 calendar in your Outlook account or is it a paper
4 copy?

5 A It's actually a Google calendar.

6 Q Okay.

7 A We use Google for e-mail.

8 Q I see. Does it date back to 2012-2013?

9 A I can't tell you how far it dates back. I
10 do know it dates back quite away.

11 Q So if I asked you to go back and take a look
12 and see how often you were here or, I guess, print
13 out and produce those calendars to your counsel,
14 that's something you could, at least, look into?

15 A I could.

16 Q Okay.

17 (Gnagy Deposition Exhibit 3 was marked
18 for identification and is attached to the
19 transcript.)

20 Q I'm showing you what's been marked as
21 Exhibit 3. Are these the weekly summaries that you
22 mentioned a minute ago?

23 A They appear to be, yes.

24 Q Okay. I will tell you that I collected

25 every weekly summary of yours I could find and

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1 compiled it into this single exhibit. I think there
2 are ten of them. Each of them has an entry that
3 relates to PWSA. My question, I think for you is,
4 if you were here every two weeks, why are there not
5 more of them?

6 A That I can't tell you. If you've only got
7 ten weekly summaries here, that's not the full list
8 of weekly summaries I provided over the time of this
9 period.

10 Q Is there a location, whether it's on your
11 own laptop or on a Veolia shared drive, where you
12 store your weekly summaries?

13 A I store them on my personal laptop, yes.

14 Q Okay. Has anybody asked you to collect
15 those and provide them to counsel in this case?

16 A I don't recall that they've asked for those,
17 no.

18 Q How far back do you store weekly summaries
19 on your laptop?

20 A I have weekly summaries back to my date of
21 hire in 2010.

22 Q Okay. I'd ask you to go back and collect
23 those, give them to counsel so they can review
24 anything that might pertain to this case and produce
25 them to us, okay?

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1 MR. GALLAGHER: Sure, that's no problem,
2 Jordan. We'll go back and look at what was
3 collected and what was produced, and then if there's
4 anything we've collected that wasn't produced, we'll
5 take a look at it, and if there's anything that
6 wasn't any collected, we'll talk to Mr. Gnagy and
7 get that to you.

8 MR. WEBSTER: Sure.

9 Q I'd like you to look at -- I'm probably
10 going to be referring to this on a number of
11 occasions today, but right now, the third summary
12 that I have here is one for the -- looks like a date
13 of March 8th, 2013. Do you see where I am?

14 A Yes, I do.

15 Q First of all, whose Mr. Nasuta?

16 A Joe Nasuta is my immediate supervisor.

17 Q Okay. What was your general purpose in
18 providing weekly summaries to Mr. Nasuta? Just to
19 let him know what you were doing?

20 A It's requested. Joe has to report to upper
21 management with where each of his employees are
22 working and what they're working on.

23 Q I see. Has it always been this way since
24 you started with Veolia?

25 A It's been this way since I started with them

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1 in 2010, yes.

2 Q On this particular weekly summary, turn to
3 the second page, Number 5. It says, Upcoming
4 Schedule Week of March 11, 2013, and then subpart A,
5 Pittsburgh, make travel arrangement for week of
6 March 18th and further memos and evaluations as part
7 of the increased workload at PWSA due to the
8 departure of one team member. Did I read that
9 correctly?

10 A Yes.

11 Q Who was the departing team member that you
12 were referring to?

13 A I believe that would have been Bob Martin.

14 Q Okay. How did his departure affect your
15 workload?

16 A Any of the initiatives that Bob was working
17 on were thrown into my schedule.

18 Q Was Bob a water treatment expert?

19 A He was a water specialist. I don't know
20 exactly what his background was.

21 Q Okay. Was he working with folks at the
22 treatment plant or in the lab at PWSA?

23 A I only know what he was working on as far as
24 initiatives. I don't know who he was working with.

25 Q What I'm trying to figure out is how your

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1 personal workload was impacted by his departure.
2 What was he doing that fell into your lap when he
3 left?

4 A A good part of it was the membrane plant
5 operation.

6 Q Okay. Anything else you can think of?

7 A Off the top of my head, I can't remember.

8 Q Okay.

9 A I do remember there were two or three things
10 that he was working on that were given to me.

11 Q Okay. So you mentioned when you visited
12 Veolia for the first -- or visited PWSA for the
13 first time in August of 2012 --

14 MR. GALLAGHER: I'm just glad I'm not the
15 only one that's done that. I think you may have
16 found me pretty good in the last one.

17 MR. WEBSTER: That's right.

18 Q You said you met with Dr. States back in
19 August, correct?

20 A That's correct.

21 Q There came a point in time when he was
22 reassigned within PWSA out of the treatment plant
23 and the lab into an office downtown, correct?

24 A As far as I remember, yes.

25 Q Okay. Do you know when that happened?

<p style="text-align: right;">Page 21</p> <p>1 A I don't recall specific dates.</p> <p>2 Q Okay.</p> <p>3 A It may have been sometime early in 2013.</p> <p>4 Q Any chance this reference in your weekly</p> <p>5 summary to a departed team member referred to the</p> <p>6 reassignment of Dr. States in February of 2013?</p> <p>7 A I don't believe so, no.</p> <p>8 Q Why not?</p> <p>9 A I was never given any responsibilities that</p> <p>10 Dr. States had.</p> <p>11 Q Okay. Did you personally -- well, let me</p> <p>12 rephrase that. When Dr. States -- just before he</p> <p>13 was reassigned, what was his position with PWSA?</p> <p>14 A I believe his title was director of water</p> <p>15 production and water quality. I don't know for</p> <p>16 sure, but I believe that was what it was.</p> <p>17 Q Okay, and when he was reassigned, how was</p> <p>18 that position filled?</p> <p>19 A Ron Duray was promoted to, I believe,</p> <p>20 interim or deputy director, and Jay Kuchta was</p> <p>21 promoted to -- again, I don't know the specific</p> <p>22 title. I think it was laboratory manager or water</p> <p>23 quality manager.</p> <p>24 Q Did any -- did Veolia's work or workload</p> <p>25 with PWSA increase in any respect when Dr. States</p>	<p style="text-align: right;">Page 23</p> <p>1 Q After Dr. States was reassigned, did you</p> <p>2 have an opinion as to whether the management folks</p> <p>3 at the plant, PWSA management folks at the plant, or</p> <p>4 the lab were good, bad, strong, weak, anything like</p> <p>5 that?</p> <p>6 A I didn't have an opinion, no.</p> <p>7 Q Sir, you're familiar with the lead and</p> <p>8 copper rule?</p> <p>9 A Yes, I am.</p> <p>10 (Gnagy Deposition Exhibit 4 was marked</p> <p>11 for identification and is attached to the</p> <p>12 transcript.)</p> <p>13 Q Exhibit 4, sir, is this a copy of the</p> <p>14 federal regulations that contain the lead and copper</p> <p>15 rule. If you need to, take a look, obviously.</p> <p>16 A It appears to be Environmental Protection</p> <p>17 Agency Part 141, possibly federal regulations, yes.</p> <p>18 Q How long have you been in the business, sir?</p> <p>19 A 40 years.</p> <p>20 Q Okay. I assume you've been at least</p> <p>21 familiar with the lead and copper rule for a</p> <p>22 relatively long period of time.</p> <p>23 A Since its development and establishment in</p> <p>24 the '90s, yes.</p> <p>25 Q Okay. Turn to Page 498 -- actually, it</p>
<p style="text-align: right;">Page 22</p> <p>1 was reassigned away from the treatment plant and the</p> <p>2 lab to an office downtown?</p> <p>3 A Not that I recall. Our workload was</p> <p>4 consistent based on issues that we identified that</p> <p>5 needed to be addressed.</p> <p>6 Q Okay, and your workload wasn't any different</p> <p>7 personally when he left?</p> <p>8 A Only from the departure of Bob Martin and</p> <p>9 having to pick up the things he was working on.</p> <p>10 Q What was your opinion of Mr. Duray?</p> <p>11 A I don't have an opinion of Mr. Duray. I</p> <p>12 didn't interface with him very much.</p> <p>13 Q What was your opinion of Dr. Kuchta,</p> <p>14 K-u-c-h-t-a?</p> <p>15 A Again, I don't have an opinion of him. They</p> <p>16 were both long-time PWSA employees, both certified</p> <p>17 staff, and I assume well-versed in the operation of</p> <p>18 the plant since they'd been there so long.</p> <p>19 Q When you were in Pittsburgh working on this</p> <p>20 project, who were you dealing with at PWSA?</p> <p>21 A It would be different people. It would be</p> <p>22 some people from the plant, some people from</p> <p>23 engineering, some people from Veolia, some people</p> <p>24 from Chester Engineers, some people from other</p> <p>25 consultants that were there.</p>	<p style="text-align: right;">Page 24</p> <p>1 probably starts on 497, 497, Section 141.90,</p> <p>2 reporting requirements. Are you familiar with that</p> <p>3 section, sir?</p> <p>4 A Yes, this appears to be the initial</p> <p>5 reporting requirements that were established.</p> <p>6 Q If you turn to Page 498, I have a portion</p> <p>7 there that's highlighted. This is Section 141.90,</p> <p>8 looks like it's Subsection (a)(3). Do you see where</p> <p>9 I am?</p> <p>10 A I see a highlighted section there, yes.</p> <p>11 There's a 3 above it.</p> <p>12 Q And this subsection concerns either</p> <p>13 additions of a new source or long-term change in</p> <p>14 water treatment, among other things. Do you see</p> <p>15 where I am, third or fourth line there?</p> <p>16 A Yes, I see.</p> <p>17 Q And about halfway down in the highlighted</p> <p>18 section, there's a sentence that starts with</p> <p>19 examples. Do you see where I am? It says</p> <p>20 examples --</p> <p>21 A Yes.</p> <p>22 Q Examples of long-term treatment changes</p> <p>23 include the addition of a new treatment process or</p> <p>24 modification of an existing treatment process. Are</p> <p>25 you with me?</p>

<p style="text-align: right;">Page 25</p> <p>1 A Yes.</p> <p>2 Q Okay, and then the next sentence reads,</p> <p>3 examples of modifications include switching</p> <p>4 secondary disinfectants, switching coagulants --</p> <p>5 I'll cut out the parentheses -- and switching</p> <p>6 corrosion inhibitor products. Do you see where I</p> <p>7 am?</p> <p>8 A I see that, yes.</p> <p>9 Q When Veolia started working with PWSA, it</p> <p>10 was using soda ash to control corrosion, correct?</p> <p>11 A That's what we were told, yes.</p> <p>12 Q Okay, and in your tour of the plant back in</p> <p>13 August of 2012, did you see for yourself how the</p> <p>14 authority was using corrosion control products?</p> <p>15 A Yes. They were using lime treatment up</p> <p>16 front in coagulation and soda ash treatment, I</p> <p>17 believe it was, into the clear well for pH and</p> <p>18 alkalinity adjustment of finished water.</p> <p>19 Q Okay.</p> <p>20 A And then they had a backup caustic soda feed</p> <p>21 for lime or for soda ash in the event that those</p> <p>22 systems would fail.</p> <p>23 Q So if it was using soda ash in the clear</p> <p>24 well, that's something that you saw back in August</p> <p>25 of 2012?</p>	<p style="text-align: right;">Page 27</p> <p>1 permit and the feasibility study that Dr. States put</p> <p>2 together, he noted in there that caustic soda was</p> <p>3 used as a backup for lime feed or for soda ash feed</p> <p>4 as needed during equipment failures, and that was</p> <p>5 approved by the state.</p> <p>6 Q So your opinion -- you're aware that the</p> <p>7 state has -- disagrees with your view, correct?</p> <p>8 A I'm aware that the state gave them a notice</p> <p>9 of violation, yes.</p> <p>10 Q And you're aware the state has imposed a</p> <p>11 civil penalty on PWSA because, in part, of a switch</p> <p>12 from soda ash to caustic soda as a corrosion control</p> <p>13 product without following the provisions of the lead</p> <p>14 and copper rule?</p> <p>15 A I know they've imposed a fine, yes. I don't</p> <p>16 know what it was for.</p> <p>17 Q And a consent order that came out on this</p> <p>18 issue came out about three weeks ago. Have you seen</p> <p>19 it?</p> <p>20 A I have not.</p> <p>21 Q You have not, okay. But it's your view that</p> <p>22 a change from soda ash to caustic soda as the</p> <p>23 corrosion control chemical did not trigger the --</p> <p>24 well, let me rephrase this.</p> <p>25 If this Subsection 3 that we just reviewed</p>
<p style="text-align: right;">Page 26</p> <p>1 A That's correct.</p> <p>2 Q And you actually made that -- you made a</p> <p>3 mention of that in your due diligence memo as well,</p> <p>4 I think, correct? Page 4, third full paragraph,</p> <p>5 very first line reads, soda ash is added to the</p> <p>6 filtered water entering the clear well for pH</p> <p>7 adjustment to pH 8.4 and final corrosion control.</p> <p>8 Did I read that correctly?</p> <p>9 A That's what I wrote, and that's what we were</p> <p>10 told --</p> <p>11 Q Right, and that's what you saw?</p> <p>12 A -- by the staff.</p> <p>13 Q And that's what you saw, correct?</p> <p>14 A I didn't physically see the soda ash going</p> <p>15 into the water, no, but I did observe that the soda</p> <p>16 ash machine was in operation that day, yes.</p> <p>17 Q Okay. Would you agree with me that based</p> <p>18 upon the section of the lead and copper rule that we</p> <p>19 just reviewed, that a change from soda ash to</p> <p>20 something else as PWSA's corrosion control chemical,</p> <p>21 sort of, triggered this section of the lead and</p> <p>22 copper rule?</p> <p>23 MR. GALLAGHER: Objection to the form.</p> <p>24 Q You can answer.</p> <p>25 A No, I don't agree. In review of PWSA's</p>	<p style="text-align: right;">Page 28</p> <p>1 is triggered, it means that PWSA or the water system</p> <p>2 had to submit written documentation to the state</p> <p>3 describing the change or addition, correct?</p> <p>4 MR. GALLAGHER: Object to the form.</p> <p>5 Q When he objects to the form, you can still</p> <p>6 answer.</p> <p>7 A Understood. Could you repeat that?</p> <p>8 Q Sure. If you look at the subsection here,</p> <p>9 end of the first sentence, which is a very long</p> <p>10 sentence, talks about -- the earlier part of the</p> <p>11 sentence talks about the addition of a new source or</p> <p>12 a long-term change, and then about nine or ten lines</p> <p>13 down, there's a phrase that starts with shall</p> <p>14 submit. Do you see where I am?</p> <p>15 A Shall submit written documentation to the</p> <p>16 state. Is that the phrase you're talking about?</p> <p>17 Q Right, describing the change or addition,</p> <p>18 right?</p> <p>19 A Yes, I see it.</p> <p>20 Q So if any of the events preceding that</p> <p>21 phrase occur, the water system has to submit written</p> <p>22 documentation to the state describing the change or</p> <p>23 addition, correct?</p> <p>24 A That's what it appears.</p> <p>25 Q That's what it says.</p>

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1 MR. GALLAGHER: Are you asking him to assume
2 that the switch from soda to caustic was a change in
3 the corrosion control?

4 MR. WEBSTER: I'm not asking him to assume
5 anything.

6 MR. GALLAGHER: I'm just trying to
7 understand what the question is.

8 MR. WEBSTER: Well, if he doesn't understand
9 it, he can tell me.

10 Q The next sentence says, the state must
11 review and approve the addition of a new source or a
12 long-term change in treatment before it is
13 implemented by the water system. Did I read that
14 correctly?

15 A Yes.

16 Q And because you're familiar with the lead
17 and copper rule, you're familiar that that's one of
18 its requirements, right?

19 A That's correct.

20 Q All right. You're aware, at least as you
21 sit here today, that at some point in time, PWSA
22 started using caustic soda instead of soda ash to
23 control corrosion, correct?

24 A I believe it was to control pH and
25 alkalinity as part of their corrosion control

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1 his position.

2 Q Okay, and these are in June of 2014, right,
3 this e-mail string?

4 A It appears to be, yes.

5 Q Second page of this e-mail, about halfway
6 down, there's a one-line e-mail on June 18, 2014 at
7 10:12 a.m. Do you see where I am?

8 A Yes.

9 Q And in it Chris Westbrook writes, FWIW, we
10 switched from soda ash to caustic the week of
11 April 27, 2014. Did I read that correctly?

12 A Yes.

13 Q Do you know what FWIW means?

14 A For what it's worth, I believe.

15 Q Had you been at the plant between April of
16 2014, the end of April 2014, and June 18th, 2014?

17 A I couldn't say without looking at schedules.
18 No, I don't know for sure.

19 Q Okay. Let's see if we have a weekly summary
20 here for that time frame. So you have a weekly
21 summary for May 30th, 2014. That's bottom
22 right-hand corner, sir, last three digits are 771.
23 It's the second to last or third to the last one.

24 A May 30th, correct.

25 Q Right.

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1 treatment, yes. I'm aware that they switched from
2 soda ash to caustic soda now.

3 Q Just so I'm clear, it's your view sitting
4 here today that that change did not trigger
5 either -- or did not require PWSA to submit written
6 documentation to the state or did not require the
7 state to review and approve that change?

8 A No, I do not.

9 MR. GALLAGHER: Object to the form, sorry.

10 A No, I do not. Again, the feasibility study
11 clearly outlined that caustic soda was a backup feed
12 in case one of the other systems failed, and that
13 PWSA, everybody believed, had the right to use that
14 during times of equipment failure or for whatever
15 reason they needed to to maintain their permit
16 ranges for pH and alkalinity.

17 Q Okay.

18 (Gnagy Deposition Exhibit 5 was marked
19 for identification and is attached to the
20 transcript.)

21 Q Exhibit 5 is an e-mail chain involving
22 yourself and Christian Westbrook, right, who was a
23 water quality manager at PWSA?

24 A At the time of these e-mails, yes. Jay
25 Kuchta had retired, and Christian was promoted to

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1 A Yes, I see it.

2 Q Looks like you have 32 hours -- let me make
3 sure I'm reading this right. Does the first page
4 here reflect that you spent 32 hours on the
5 Pittsburgh Water and Sewer Authority project this
6 week?

7 A Yes.

8 Q Okay. Can you tell whether you were in
9 Pittsburgh that week?

10 A It appears so, because I was conducting jar
11 tests and that would have been on site.

12 Q Do you recall -- I don't see anything in
13 this summary that indicates, you know, what
14 corrosion control chemicals were being used, but do
15 you recall during that week you were here doing jar
16 testing, observing that caustic soda was being used
17 rather than soda ash?

18 A No. That was not something I typically
19 looked at.

20 Q Okay. From the end of April 2014 through
21 the last visit you had here, do you ever recall
22 seeing caustic soda being used as a corrosion
23 control -- as the corrosion control chemical instead
24 of soda ash?

25 A I don't recall observing it, no. There were

<p style="text-align: right;">Page 33</p> <p>1 numerous times throughout the year that the soda ash 2 machine or soda ash feed line would plug up and they 3 would have to request maintenance and cleaning on 4 it, and during those times, I was told, they would 5 switch to caustic soda as a backup, and that was 6 routine practice. 7 Q Okay. The e-mail that Mr. Westbrook sent to 8 you on June 18, 2014, did you do anything with that 9 information where he said we switched from soda ash 10 to caustic -- 11 A If you look at these e-mails, these e-mails 12 are discussing high pHs in Highland 1, possibly from 13 algae activity and the change in pH, and some of the 14 discussions that proceeded on that. At that time, 15 we were using an algaecide that had soda ash in it 16 as one of the byproducts. It was suspected at that 17 time that maybe the increase in pH was due to the 18 byproduct formation from algaecide, and this is the 19 way some of the discussions proceeded throughout 20 this whole e-mail chain. 21 Q Okay. So my question was: When 22 Mr. Westbrook told you here June 18th, 2014 at 10:12 23 a.m. that the Authority had switched from soda ash 24 to caustic soda about six weeks prior, seven weeks 25 prior, did you do anything with that information?</p>	<p style="text-align: right;">Page 35</p> <p>1 A It does not. 2 Q It does not? 3 A It does not, with the maintenance activities 4 at the plant. There were pieces of equipment out of 5 service for years -- 6 Q Okay. 7 A -- waiting on either scheduling or parts or 8 some reason that they would be out of service. 9 Q Did you ask Mr. Westbrook whether the switch 10 from soda ash to caustic soda that he refers to in 11 this e-mail was a switch that was permanent or 12 temporary? 13 A I did not ask him. I assumed it was their 14 routine temporary switch because the soda ash had 15 malfunctioned. 16 Q Okay. Do you know of anybody -- strike 17 that. If you had asked Mr. Westbrook whether it was 18 a permanent or a temporary switch and he told you it 19 was permanent, do you think that would have 20 triggered any obligations to describe the change or 21 submit it for -- submit the change for approval 22 under the lead and copper rule? 23 MR. GALLAGHER: Objection, calls for 24 speculation. 25 A If it were considered a permanent switch,</p>
<p style="text-align: right;">Page 34</p> <p>1 MR. GALLAGHER: Asked and answered. 2 A Again, this is all related to the high pH 3 levels at the Highland 1 reservoir that they were 4 experiencing -- 5 Q Did you ask Mr. Westbrook -- 6 A Hang on. Let me finish. 7 Q Sorry. 8 A -- and the discussions revolving the use of 9 soda ash and was it, you know, concentrating in the 10 reservoir or was there some other reason. He 11 informed me that, in fact, they had switched from 12 soda ash to caustic soda. This appeared to me to be 13 one of their normal changes because of a feed system 14 malfunction, that he was saying, well, we're not 15 using soda ash at the plant right now. We're using 16 caustic soda, telling me that this might have been 17 something that we should look at as far as the 18 change in pH. So that's one of the things that we 19 looked at. 20 Q So you read this to mean that they had 21 switched from soda ash to caustic as part of the 22 normal course because caustic was the backup? 23 A That's correct. 24 Q Does that strike you as unusual that they 25 had been using a backup for seven weeks?</p>	<p style="text-align: right;">Page 36</p> <p>1 something that the staff had chosen to do -- again, 2 as far as we knew from their permit, they had the 3 right to use caustic soda as needed as corrosion 4 control treatment additive. 5 I probably would have at least had a 6 courtesy call to DEP informing them that either a 7 soda ash had failed for an extended period of time 8 and we had to go on caustic soda or we were 9 permanently switching to caustic soda, and then the 10 state would have had to determine whether it fell 11 under those rules and the rules of the State of 12 Pennsylvania. 13 Q Okay. Let's say that happened, and the 14 state said our interpretation of that is that's a 15 change that triggers this subsection of the lead and 16 copper rule. You have to tell us what your change 17 is and submit it for approval. How easily or how 18 difficult would it have been to switch back to soda 19 ash, at least in the meantime? I mean, is that 20 something that takes a day? Is that something that 21 takes three weeks? 22 A It depends on the malfunction issue. 23 Q Okay. 24 A I never was given information on how long it 25 took to clean out the line or fix the feeder or fix</p>

<p style="text-align: right;">Page 37</p> <p>1 the soften water system. I just don't have any of 2 that information. It is possible that it would take 3 a period of time that would be relatively short to 4 put the soda ash machine and the feed system back in 5 operation. 6 Q And to be clear, do you have any knowledge 7 that the soda ash machine was or had malfunctioned 8 and was not operational at the time here in April, 9 May and June of 2014? 10 A I have no knowledge specifically that the 11 system had failed, no. I just assumed based on his 12 information, since we've been talking about soda 13 ash, he was letting me know that they were feeding 14 caustic soda. 15 Q If the system was operational on June 18th, 16 2014, and the decision was made to switch back to 17 soda ash, do you think that's something that would 18 have happened in a day or two if you have the 19 material on hand? 20 A Assuming both systems were fully functional, 21 it would just be simply turning off the caustic soda 22 feed system and turning on the soda ash feed system. 23 Q Did you ever have any conversations with 24 Glen Lijewski about -- in this time frame, 2014, 25 about PWSA making a permanent switch from soda ash</p>	<p style="text-align: right;">Page 39</p> <p>1 any potential inefficiencies. Particularly during 2 the jar testing, I was reviewing the ferric chloride 3 dosages to see if they were matching up with what 4 the jar test dosages were showing us, and made 5 adjustments accordingly based on the technical data 6 and the analytical data. 7 Q When did you become aware that DEP had 8 issued a notice of violation because of a change 9 that the PWSA had made from soda ash to caustic 10 soda? 11 A This would have been early 2016. 12 Q Okay. 13 (Gnagy Deposition Exhibit 6 was marked 14 for identification and is attached to the 15 transcript.) 16 Q Exhibit 6. Exhibit 6 is an e-mail exchange 17 involving, looks like, only -- or at least the top 18 three pages appear to be e-mails between and among 19 Veolia folks, yourself, Mr. Tolbert, Michael 20 Stephens, Robert Nicholas. Do you see where I am? 21 A Yes. 22 Q And you're discussing the notice of 23 violation that DEP had issued for the switch from 24 soda ash to caustic soda, correct? 25 A Correct.</p>
<p style="text-align: right;">Page 38</p> <p>1 to caustic soda as a corrosion control product? 2 A No, I did not. 3 Q What about Jim Paprocki? 4 A I didn't have any conversations with any 5 PWSA staff about a permanent switch from soda ash to 6 caustic, no. 7 Q Did you receive feed reports? 8 A Feed reports? 9 Q Yeah, reports that would reflect which 10 chemicals were being used on a daily basis -- 11 A I did not. 12 Q -- at PWSA? 13 A I did not. 14 MR. GALLAGHER: Let him finish his question 15 because she's typing it down, and it's tough for her 16 to get it down if you guys are talking over each 17 other. 18 Q Can you think of a single instance in the 19 three-plus years you were involved at PWSA in which 20 you asked for or received some report reflecting 21 what chemicals were being used at PWSA on a daily 22 basis? 23 A On a daily basis, no. Once in a while, I 24 would review annual usage, if there was an 25 initiative that we were looking at, particularly for</p>	<p style="text-align: right;">Page 40</p> <p>1 Q Did you -- were you aware or is this the 2 first that you heard of the notice of violation? 3 A Yes, it is. 4 Q Top of Page 2 of this e-mail, there's an 5 e-mail from Mr. Nicholas. He says, good morning, 6 Marvin. Any idea what this is about? Do you see 7 where I am? 8 A I do. 9 Q And then you respond, bottom of Page 1, 10 said, according to the notice from DEP, PWSA did not 11 feed soda ash from 2016 to 2016. Is that a typo, 12 looks like? 13 A I didn't hear the question, I'm sorry. 14 Q I'm sorry. I was reading your e-mail to 15 you. The first couple lines of that e-mail read, 16 according to the notice from DEP, PWSA did not feed 17 soda ash, and then the time period you have here is 18 from 2016 to 2016. I assume that is a typo of some 19 sort. 20 A It appears to be a typo, yes. 21 Q Okay. Some time prior to 2016 to 2016 is 22 probably more accurate. Do you agree? 23 A Yes. 24 Q Okay, and is in violation of the corrosion 25 control technique. I know for a fact that PWSA did</p>

<p style="text-align: right;">Page 41</p> <p>1 feed soda ash during that time. Did I read that 2 correctly? 3 A Yes. 4 Q What was the basis of that statement? 5 A I'm sorry? 6 Q What was the basis of your statement that 7 you knew for a fact that PWSA did not -- or did feed 8 soda ash during that time? 9 A I believe the notice said from 2014 to 2016. 10 Q Okay. 11 A If I remember correctly. I had chemical 12 feed records for -- a summary of the annual feed 13 records for 2014 and did see that, in fact, they did 14 feed soda ash during several times throughout that 15 year as well as some caustic soda. 16 Q Okay. What was the context in which you had 17 obtained those feed records? 18 A That would have been for some other 19 initiative that we were working on at that time -- 20 Q Okay. 21 A -- where I needed to see the 2014 feed 22 records. 23 Q Did PWSA in 2014 use soda ash -- well, let's 24 say prior to the switch. Was it using soda ash just 25 in the clear well or was it using it elsewhere in</p>	<p style="text-align: right;">Page 43</p> <p>1 effluent water and distribution water quality. 2 Q When did you review the permit that you just 3 referred to in your answer? 4 A I was sent the permit during this time frame 5 that's in the e-mail string that you're referring 6 to. 7 Q Had you seen it previous to February 2016? 8 A I had not. 9 Q That's not something that you reviewed back 10 in August of 2012? 11 A No. 12 Q Why not? 13 A There was no need to. It was stated to us 14 that they were using corrosion control treatment 15 using pH and alkalinity adjustment and that they 16 were in compliance with the lead and copper action 17 levels. 18 Q Okay, and you didn't think it was necessary 19 to actually ask for a copy of the permit, whether 20 for background or double check or anything like 21 that? 22 A I did not. We were told the pH and 23 alkalinity ranges that they had operated under. 24 Q Do you know if anybody at Veolia reviewed 25 the permit that you say you saw for the first time</p>
<p style="text-align: right;">Page 42</p> <p>1 the process also? 2 A As far as I'm aware, the only soda ash feed 3 point is filtered water going to the clear well. 4 Q The clear well, okay. Let's assume your 5 statement here is correct and that PWSA did feed 6 soda ash during this time. That's really not the 7 issue, is it? The issue is whether there had been a 8 change from soda ash to something else? 9 So a better way of saying it is the fact 10 that they had fed soda ash at some point in time 11 over two years isn't really, particularly, relevant 12 to whether or not a change had been made, right? 13 MR. GALLAGHER: Object to the form. 14 A I'm not sure I understand your question. 15 Q Okay. Why did you think -- let me rephrase 16 that. Did you think the -- at this time, did you 17 think the notice of violation or the basis of the 18 notice of violation that PWSA had received was 19 incorrect? 20 A I believed it was incorrect, yes. 21 Q Okay, and why did you believe it was 22 incorrect? 23 A The permit does not specifically state which 24 chemicals to use for corrosion control treatment. 25 It only gives pH and alkalinity ranges for plant</p>	<p style="text-align: right;">Page 44</p> <p>1 in February of 2016? 2 A I can't say whether anybody reviewed it or 3 not. 4 Q Moving up the first page of this e-mail 5 string, Mr. Nicholas says -- he responds to you and 6 says, thanks, and then you have a further response 7 later that day to Mr. Nicholas and Mr. Tolbert. You 8 write, talk to Todd Adams. Does that mean you had 9 referred -- or it means you had talked with him or 10 were you telling somebody to talk to him? 11 A I had talked to Todd Adams, and I was asking 12 them to talk to Todd as well. 13 Q Okay. So you had talked to him that day? 14 A In this specific time frame, one or two 15 days, yes. 16 Q Okay. Is the rest of -- is the rest of what 17 you say in this e-mail a summary of what Mr. Adams 18 had told you? 19 A It appears to be, yes. 20 Q So you continue to write, doesn't know much, 21 but apparently someone from PWSA told media they 22 were not feeding soda ash and media called DEP. Do 23 you know who that someone was? 24 A I do now. 25 Q Mr. Good, right?</p>

<p style="text-align: right;">Page 45</p> <p>1 A Yes, that's correct.</p> <p>2 Q And then you say, Jim needs to demand feed</p> <p>3 records and tap water quality for 2014 and 2015 from</p> <p>4 his staff to show DEP they were not in violation.</p> <p>5 Did I read that correctly?</p> <p>6 A Yes.</p> <p>7 Q What tap water quality documents for 2014 or</p> <p>8 2015 do you think would reflect that PWSA was not in</p> <p>9 violation?</p> <p>10 A Those would be the finished water pH and</p> <p>11 alkalinity levels that were within the permit</p> <p>12 requirements and the corrosion control treatment</p> <p>13 that we were told they were operating under.</p> <p>14 Q Now, the feed records would show what they</p> <p>15 were actually using, right?</p> <p>16 A Feed records?</p> <p>17 Q You refer to feed records here as well.</p> <p>18 A Yes.</p> <p>19 Q You say Jim needs to demand feed records.</p> <p>20 A DEP claimed they didn't feed soda ash during</p> <p>21 a specific time frame, and I had records showing</p> <p>22 that they did feed soda ash during that time frame.</p> <p>23 Q You also say, I don't need to be involved</p> <p>24 from this point forward. Do you see that?</p> <p>25 A Yes, I do.</p>	<p style="text-align: right;">Page 47</p> <p>1 first page, he outlines the timeline that, I guess,</p> <p>2 the DEP apparently had assumed. Do you see where I</p> <p>3 am?</p> <p>4 A The dated February 25th section?</p> <p>5 Q Yeah. There are three, sort of, bullet</p> <p>6 points in this e-mail. It says, the letter</p> <p>7 basically identifies --</p> <p>8 A Yes, I see where you are.</p> <p>9 Q They say: When they switched from soda ash</p> <p>10 to caustic, November 2013; when they switched back</p> <p>11 from soda ash due to pH fluctuation, December 2013;</p> <p>12 and the switch back from caustic soda on April 29th,</p> <p>13 2014 until now. Did I read that correctly?</p> <p>14 A Yes.</p> <p>15 Q So in this e-mail, Mr. Stephens is saying --</p> <p>16 well, let me ask that differently. Did you</p> <p>17 interpret or have any view when you read</p> <p>18 Mr. Stephens' e-mail as to whether the switch in</p> <p>19 April of 2014 from soda ash to caustic soda was</p> <p>20 permanent or temporary?</p> <p>21 A At the time of this e-mail, I did not know</p> <p>22 if it was permanent or temporary, no.</p> <p>23 Q The next paragraph in Mr. Stephens' e-mail</p> <p>24 he writes, at this time Veolia is not at risk for</p> <p>25 being held directly responsible for this violation,</p>
<p style="text-align: right;">Page 46</p> <p>1 Q Why did you say that?</p> <p>2 A We were no longer under contract and we had</p> <p>3 other workloads to work on and felt that all they</p> <p>4 had to do was show DEP that they complied with the</p> <p>5 alkalinity and pH levels in their permit and there</p> <p>6 was no violation.</p> <p>7 Q Did you feel like you had any responsibility</p> <p>8 at this point in time to respond to the notice of</p> <p>9 violation or address the DEP's allegations?</p> <p>10 A No, I did not.</p> <p>11 Q That's because the contract had expired?</p> <p>12 A We were no longer working for PWSA.</p> <p>13 Q Okay.</p> <p>14 (Gnagy Deposition Exhibit 7 was marked</p> <p>15 for identification and is attached to the</p> <p>16 transcript.)</p> <p>17 Q Exhibit 7. Deposition Exhibit 7 is another</p> <p>18 e-mail string. It appears to include yourself,</p> <p>19 Mr. Stephens, Mr. Nicholas and Mr. Tolbert, dated</p> <p>20 January -- excuse me, February 25th and 26th of</p> <p>21 2016. Do you recall receiving this or being</p> <p>22 involved in this e-mail string?</p> <p>23 A I do.</p> <p>24 Q So in Mr. Stephens' e-mail to, I presume,</p> <p>25 the three of you, which is here, bottom half of this</p>	<p style="text-align: right;">Page 48</p> <p>1 but we must be prepared for any possible</p> <p>2 repercussions due to the fact that we were holding</p> <p>3 the executive director and COO positions as these</p> <p>4 issues arose. Did I read that correctly?</p> <p>5 A That's what it says, yes.</p> <p>6 Q Were you the most senior -- let me ask it</p> <p>7 this way. I've seen the acronym SME on lot of</p> <p>8 documents. I understand it's a subject matter</p> <p>9 expert.</p> <p>10 A That's correct.</p> <p>11 Q Okay. Were you the senior subject matter</p> <p>12 expert for Veolia on water production, water</p> <p>13 quality, those sorts of issues on this project?</p> <p>14 A I was.</p> <p>15 Q Were there any other SMEs that Veolia</p> <p>16 assigned to this project to deal with water</p> <p>17 production or water quality issues?</p> <p>18 A No.</p> <p>19 Q Do you feel like -- when you were the senior</p> <p>20 and the only Veolia subject matter expert on this --</p> <p>21 on water treatment and water quality issues on this</p> <p>22 project, what was the, sort of, the reporting</p> <p>23 structure? If there were issues at the plant, did</p> <p>24 they deal with them through you? Did they deal with</p> <p>25 them on their own? How did that all work?</p>

<p style="text-align: right;">Page 49</p> <p>1 A Throughout the project, we were asked to</p> <p>2 identify areas where we could improve performance,</p> <p>3 either in water production or in water quality. And</p> <p>4 through several document reviews, looking at</p> <p>5 benchmarking analysis with other systems, we</p> <p>6 identified a number of issues that probably needed</p> <p>7 attention, and we would bring those to the Veolia</p> <p>8 staff, and they would eventually be passed on to the</p> <p>9 steering committee and the board as avenues that</p> <p>10 needed to be investigated, and they would tell us</p> <p>11 then what they wanted us to do out of that list.</p> <p>12 Q If it wasn't an initiative or an area for</p> <p>13 improvement that Veolia had identified and then</p> <p>14 worked up and presented to the steering committee or</p> <p>15 to the board, what responsibility did Veolia have</p> <p>16 for everyday operations at the plant or the lab?</p> <p>17 MR. GALLAGHER: Object to the form.</p> <p>18 A I believe our contract was management</p> <p>19 oversight --</p> <p>20 Q Okay.</p> <p>21 A -- of the facilities.</p> <p>22 Q So you would agree or in your view, Veolia</p> <p>23 had some oversight or management oversight</p> <p>24 responsibilities for the plant and the lab?</p> <p>25 MR. GALLAGHER: Object to the form.</p>	<p style="text-align: right;">Page 51</p> <p>1 Q And what was the response?</p> <p>2 A They were in compliance.</p> <p>3 Q Okay.</p> <p>4 A And had a long history of compliance.</p> <p>5 Q Was there any further discussion about that</p> <p>6 issue in your interview with Dr. States back in</p> <p>7 August of '12?</p> <p>8 A No. They were in compliance with several</p> <p>9 rules, and those were just noted.</p> <p>10 Q Did you ask what he meant by in compliance?</p> <p>11 Was he close, was he not close, that sort of stuff?</p> <p>12 A No. Again, during that time frame,</p> <p>13 compliance meant you met the rule.</p> <p>14 Q Okay.</p> <p>15 A And that was all that was necessary.</p> <p>16 Q Do you know -- so as part of that visit that</p> <p>17 you made to PWSA, you didn't ask for any records</p> <p>18 that would reflect lead and copper test results?</p> <p>19 A I don't recall at the time specifically</p> <p>20 asking for some records. Through the preparation</p> <p>21 process, I did see an e-mail that someone sent me</p> <p>22 2010 records.</p> <p>23 Q Do you know whether anyone at Veolia had</p> <p>24 asked for lead and copper records as part of due</p> <p>25 diligence?</p>
<p style="text-align: right;">Page 50</p> <p>1 A We had management responsibilities over the</p> <p>2 supervisors and managers that were at the plant,</p> <p>3 yes.</p> <p>4 Q In practice, did Mr. Duray or</p> <p>5 Dr. Kuchta -- did they communicate with you</p> <p>6 regarding issues that were not part of an initiative</p> <p>7 or an improvement project?</p> <p>8 A Yes. They would bring issues that they were</p> <p>9 observing to our attention, and nine times out of</p> <p>10 ten, you know, a good part of the time, those were</p> <p>11 worthwhile issues for investigating, and they were</p> <p>12 put on the list as well.</p> <p>13 MR. GALLAGHER: Jordan, we've been going for</p> <p>14 about an hour. Do you mind if we take a quick</p> <p>15 break?</p> <p>16 MR. WEBSTER: Sure.</p> <p>17 (A recess was taken.)</p> <p>18 Q Sir, when you first visited PWSA in August</p> <p>19 of 2012, did you ask anybody about lead and copper</p> <p>20 rule testing and what PWSA's recent testing showed?</p> <p>21 A During the interview with Dr. States, yes, I</p> <p>22 asked him a lot of water quality and regulatory</p> <p>23 results.</p> <p>24 Q Okay.</p> <p>25 A One of which was lead and copper.</p>	<p style="text-align: right;">Page 52</p> <p>1 A That, I don't know.</p> <p>2 (Gnagy Deposition Exhibit 8 was marked</p> <p>3 for identification and is attached to the</p> <p>4 transcript.)</p> <p>5 Q Exhibit 8. Is this the e-mail that you are</p> <p>6 referring to?</p> <p>7 A I recall some of these results. I do not</p> <p>8 recall getting all of these copies of letters signed</p> <p>9 by Dr. States.</p> <p>10 Q Okay. The cover e-mail here is from Manshi</p> <p>11 Low to you with copies to Bill Thompson, Dale</p> <p>12 Pershing and Kareen Baker, correct?</p> <p>13 A It appears to be.</p> <p>14 Q She writes, Marvin, as requested, please</p> <p>15 find three files as attached. Had you requested</p> <p>16 these files?</p> <p>17 A I did not.</p> <p>18 Q Why was she -- do you have any understanding</p> <p>19 as to why she would have thought -- I mean, she</p> <p>20 apparently thought you had requested them.</p> <p>21 A It appears somebody requested them, but I</p> <p>22 don't recall -- I don't recall requesting lead and</p> <p>23 copper results.</p> <p>24 Q Did you after you received these call</p> <p>25 Ms. Low and say, I didn't ask for these, why are you</p>

<p style="text-align: right;">Page 53</p> <p>1 sending them to me?</p> <p>2 A I did not. I got a lot of information from</p> <p>3 Manshi during the project.</p> <p>4 Q Who was Mr. Thompson?</p> <p>5 A Bill Thompson works for Veolia.</p> <p>6 Q In what capacity?</p> <p>7 A Out of the Pittsburgh office. I believe he</p> <p>8 is -- he manages part of our compliance group.</p> <p>9 Q Okay. What about Mr. Pershing?</p> <p>10 A Dale Pershing works for -- did work for</p> <p>11 Veolia under Bill Thompson.</p> <p>12 Q Here in Pittsburgh?</p> <p>13 A No. Dale, I believe, is in -- was in</p> <p>14 Indianapolis.</p> <p>15 Q And what about Kareen Baker?</p> <p>16 A Kareen Baker was a Veolia employee, lived in</p> <p>17 California. She's no longer with the company. She</p> <p>18 was doing part of the laboratory investigations.</p> <p>19 Q Did you speak with Mr. Thompson,</p> <p>20 Mr. Pershing or Mr. Baker about the 2010 lead and</p> <p>21 copper documents that are attached to this e-mail?</p> <p>22 A No, I did not.</p> <p>23 Q Did you do anything with this e-mail or the</p> <p>24 attachments at all?</p> <p>25 A I looked through it to see what it was and</p>	<p style="text-align: right;">Page 55</p> <p>1 for identification and is attached to the</p> <p>2 transcript.)</p> <p>3 Q Exhibit 9. Exhibit 9 is an e-mail exchange.</p> <p>4 It looks like it is all on August 1st of 2013. As</p> <p>5 far as I can tell, it refers to a lab accreditation</p> <p>6 issue. Is that a fair summary?</p> <p>7 A It appears to be discussions about</p> <p>8 accreditation to run THM analysis.</p> <p>9 Q Right, and Mr. Good in the middle of the</p> <p>10 first page e-mails just you and says, can you</p> <p>11 resolve tomorrow, and then his next sentence reads,</p> <p>12 given the COA for the lab last year, how could this</p> <p>13 have happened. Did I read that correctly?</p> <p>14 A Yes.</p> <p>15 Q And your response to him says, you do</p> <p>16 realized -- I think you meant realize, not realized.</p> <p>17 You do realize we do not have a strong plant manager</p> <p>18 out there, right? Did I read that correctly?</p> <p>19 A You read it correctly, but you're out of</p> <p>20 context. You look at the time stamps, the e-mail</p> <p>21 from Jim Good was at 4:36 p.m. on the 1st, and the</p> <p>22 one you just read was 3:42 p.m. on the 1st. It's a</p> <p>23 separate e-mail on a separate issue.</p> <p>24 Q What's the separate issue?</p> <p>25 A I don't know. I don't see the rest of the</p>
<p style="text-align: right;">Page 54</p> <p>1 saw that there were lead and copper results here,</p> <p>2 but there's no indication of 90th percentile, and</p> <p>3 they were in compliance with the rule, so I put it</p> <p>4 aside and concentrated on more pressing issues.</p> <p>5 Q Okay. What were the more pressing issues</p> <p>6 you're referring to?</p> <p>7 A The trihalomethane, THM, issue was</p> <p>8 paramount.</p> <p>9 Q Why was it paramount?</p> <p>10 A Because they were already getting high</p> <p>11 locational averages throughout the city, looking at</p> <p>12 possibly additional treatment in storage reservoirs</p> <p>13 and the distribution system to reduce THMs. They</p> <p>14 weren't in violation, but they had received</p> <p>15 operational evaluation level notices that if you</p> <p>16 continue along this path, it's likely you're going</p> <p>17 to have a violation of THMs.</p> <p>18 Q Trends were reflecting that they were headed</p> <p>19 towards an evaluation?</p> <p>20 A Correct.</p> <p>21 Q And you thought that was a paramount issue</p> <p>22 for you because you wanted to head that off before</p> <p>23 it became a violation?</p> <p>24 A That's correct.</p> <p>25 (Gnagy Deposition Exhibit 9 was marked</p>	<p style="text-align: right;">Page 56</p> <p>1 string here.</p> <p>2 Q Mr. Good was from California, right?</p> <p>3 A What's that?</p> <p>4 Q Mr. Good, he came from California, right?</p> <p>5 A Mr. Good was on site.</p> <p>6 Q But he was originally from California,</p> <p>7 right?</p> <p>8 A That's correct, but he was on site through</p> <p>9 the whole project.</p> <p>10 Q He travels for work, correct? Did Mr. Good</p> <p>11 travel for work when he was at PWSA?</p> <p>12 A He was here on site almost the entire time.</p> <p>13 There were a few times that he traveled on weekends</p> <p>14 to go home, yes.</p> <p>15 Q Do you travel for work?</p> <p>16 A I do, yes.</p> <p>17 Q Do you think it's possible that the time</p> <p>18 stamp here is a result of being in different time</p> <p>19 zones?</p> <p>20 A No.</p> <p>21 Q Okay.</p> <p>22 A I don't believe so. Again, August 2013, Jim</p> <p>23 Good would have been here in Pittsburgh in the</p> <p>24 eastern time zone.</p> <p>25 Q Do you have any -- well, you know what, we</p>

<p style="text-align: right;">Page 57</p> <p>1 can argue about that some other time. As of 2 August 1, 2013, it was your view that PWSA did not 3 have a strong plant manager, correct? 4 A I believe Ron Duray was not a strong plant 5 manager from the standpoint of progressing the 6 utility, no. 7 Q Okay. 8 A He was -- 9 Q That's who you were referring to here? 10 A Yes. He was -- 11 MR. GALLAGHER: Let him finish. 12 A He was fully competent as a long-term PWSA 13 employee and certified operator, certified by the 14 state, as far as water treatment and distribution 15 operations. 16 Q So what was his -- what was his shortcoming 17 in your view then? 18 A I didn't feel he was going to be the 19 long-term plant manager to develop capital 20 improvement plans and to do master planning and to 21 do succession planning and those types of things. I 22 didn't feel those were in his skill sets and with 23 his -- he was already beyond eligible retirement 24 age, and he likely would not do those duties since 25 he was so close to retirement.</p>	<p style="text-align: right;">Page 59</p> <p>1 Q You don't believe anybody manipulated this 2 document, do you? 3 A I don't believe so, no. 4 Q So you thought Mr. Duray was not a strong 5 plant manager in some respects? 6 MR. GALLAGHER: Asked and answered. 7 Q Right? 8 A I've already answered that, sir. 9 Q Okay. You told me earlier this morning, 10 though, that you didn't have an opinion on people 11 who were managing the plant or the lab. Do you 12 recall that? 13 MR. GALLAGHER: I'm going to object on one 14 notion here that you're asking him his opinion. 15 He's here as a designee on behalf Veolia. He's not 16 here as a fact witness, and I'm failing to 17 understand how his opinion about these individuals 18 is relevant in terms of his presence here as a 19 designee. 20 MR. WEBSTER: I don't have to answer that. 21 You put your objection on the record. 22 (Gnagy Deposition Exhibit 10 was marked 23 for identification and is attached to the 24 transcript.) 25 Q Exhibit 10. Sir, I'm showing you what we've</p>
<p style="text-align: right;">Page 58</p> <p>1 It had nothing to do with the routine 2 operation of the plant. It was moving forward. 3 Q Well, Mr. Good had asked you how this lack 4 of accreditation had occurred, and your response 5 is -- relates to the plant management. I'm -- 6 A Again -- 7 Q I'm failing to connect how -- 8 A I'm failing to connect, sir, how this e-mail 9 corresponds to any of the rest of this string. 10 Q So you were just voluntarily telling 11 Mr. Good that PWSA did not have a strong plant 12 manager out there? 13 A I don't know where this section of the 14 e-mail string comes from. I can't tell you. 15 Q You know this is a document that Veolia 16 produced to us? 17 A I understand, but I -- it's out of context. 18 Again, I can't tell you where this comes from. 19 Q Well, you don't know it's out of context. 20 You just see the two different time stamps, right? 21 MR. GALLAGHER: Objection to form. 22 A I see different time stamps and -- 23 Q You don't have any knowledge as to how the 24 two different time stamps got -- 25 A No, I don't know.</p>	<p style="text-align: right;">Page 60</p> <p>1 marked as Exhibit 10, I think, or 11 -- 10. This is 2 an e-mail from Gina Cyprych to a number of folks. I 3 will acknowledge you are not on it. 4 Here's my question for you. Here on 5 September 30th of 2013, the last bullet point, Miss 6 Cyprych reports that the Authority had met all of 7 the requirements for triannual lead and copper. See 8 where I am? 9 A Yes, I do. 10 Q Do you recall ever receiving the information 11 yourself that the Authority had met requirements for 12 the triannual lead and copper testing sometime 13 around, you know, September 30th of 2013? 14 A I don't recall receiving any written notice. 15 I did have a conversation with the Veolia staff that 16 we had met lead and copper. 17 Q Do you recall when that conversation would 18 have taken place? 19 A Off the top of my head, no. 20 Q Who would have -- who do you recall telling 21 you that in 2013 PWSA had met lead and copper rule 22 requirements? 23 A It was in the regular staff meeting during 24 one of our plant visits, likely would have been Jim 25 Good reporting what Gina has in this.</p>

<p style="text-align: right;">Page 61</p> <p>1 Q The staff meeting, would that include only 2 Veolia folks or both Veolia and PWSA folks? 3 A PWSA was not included in the Veolia staff 4 meetings, no. 5 Q Okay, and what you recall is this report 6 being made during a Veolia staff meeting? 7 A It was a verbal report that we had met -- 8 Q Sure. 9 A -- THMs and lead and copper. 10 Q Did Veolia ever ask for the actual 2013 lead 11 and copper test results? 12 A I don't recall that Veolia did, 13 specifically. I did at one point. 14 Q When did you ask for the 2013 lead and 15 copper test results? 16 A I don't remember the exact time frame. It 17 would have been, maybe, February of 2015. 18 Q Why did you ask for the 2013 test results in 19 approximately February of 2015? 20 A I had heard a couple of times that they met 21 the lead and copper rule. I was just curious to see 22 what the levels were. 23 Q Why? Why were you curious in February of 24 2015 to see the specifics? Why then as opposed to 25 any point in time prior?</p>	<p style="text-align: right;">Page 63</p> <p>1 Q What did you see when you received the 2 results for 2013 lead and copper testing? 3 A Well, what I was given was the raw data with 4 just lead and copper results on it. There was no 5 indication of 90th percentile levels. 6 Q Okay. Who gave that data to you? 7 A I believe it was Christian Westbrook. 8 Q When he gave you the raw data, could you use 9 it to figure out the 90th percentile? 10 A Yes, I could. 11 Q Did you do that? 12 A I did. 13 Q What did you find? 14 A The level was about 14.7. 15 Q And what did that tell you? 16 A It told me that it was a little too close to 17 the 15 action level for my opinion. 18 Q Okay, and did you make any recommendations 19 or have any discussions because you thought that was 20 maybe a little too close for comfort? 21 A Yes. I told Scott Towler, our COO at that 22 time, that I'd gotten the lead and copper results, 23 and that the levels appeared to be too close to the 24 levels for my taste, and that maybe a review of the 25 corrosion control treatment should be done.</p>
<p style="text-align: right;">Page 62</p> <p>1 A We were already getting information from 2 U.S. EPA. They had publicly announced that any 3 level of lead, they felt, was dangerous in drinking 4 water, and they had promised to review and revise, 5 as necessary, the lead and copper rule. Some of 6 that information had been known at that time. I was 7 just checking to see what our levels were and if 8 there was possibly any additional corrosion control 9 treatment adjustments that would have been needed 10 for the next round in 2016. 11 Q When do you -- when did you first learn that 12 U.S. EPA was -- maybe I'm summarizing this 13 incorrectly, but you can tell me if I'm wrong. That 14 U.S. EPA was reassessing the lead and copper rule? 15 A I don't recall an exact date. I mean, they 16 have made numerous changes to the lead and copper 17 rule since its initial promulgation in the '90s. 18 Q Was it in 2014 that you recall hearing -- 19 A Don't recall. 20 Q But it's that background that caused you to 21 ask for the 2013 results? 22 A Yes. 23 Q Did you ask for results for lead and copper 24 testing for any years prior to 2013? 25 A I did not.</p>	<p style="text-align: right;">Page 64</p> <p>1 Q And did you have any conversations about the 2 2013 lead and copper results, other than the one 3 that you just described? Did you talk to Mr. Good? 4 Did you talk to Mr. Tolbert? Did you talk to people 5 at the plant, anything like that? 6 A No, I told Mr. Towler what I found in the 7 2013 monitoring results. 8 Q Did you have any follow-up discussions with 9 Mr. Towler about that? 10 A I did not. 11 Q Did Mr. Towler -- what was his response when 12 you told him that you had reviewed the results and 13 that there were -- you know, they were at 14.7 or so 14 and the action level was 15, right? What was his 15 response? 16 A He didn't give me a response. He was headed 17 off to a meeting. 18 Q Was this a verbal conversation? 19 A Yes, it was. 20 Q Was it documented in any way? 21 A No. 22 Q Did you ever follow up with him either in 23 person or by e-mail to say, you know, do you want to 24 talk about that again? Should we talk about what 25 steps we can take, anything like that?</p>

<p style="text-align: right;">Page 65</p> <p>1 A No, I didn't follow up with him. If it was 2 an issue, I would have been asked to investigate it. 3 PWSA staff were managing treatment and knew what the 4 levels were. They didn't feel it was important 5 enough to notify me that the level was 14.7. 6 Q Did you go back and look at -- well, let me 7 ask it this way. As you sit here today, do you know 8 what the 90th percentile level was back in 2010? 9 A Today, I do, yes. 10 Q And, you know, I don't have the document in 11 front of you, but best recollection, what was that 12 number? 13 A Around 10 parts per billion. 14 Q Do you, as you sit here today, know what the 15 90th percentile number was in 2007? 16 A I don't recall what that number was, no. 17 Q Did you know at one time? 18 A No. 19 Q Okay. So the scope of your knowledge as to 20 90th percentile levels for PWSA is limited to what 21 the reading was, what the level was, in 2010 and 22 what it was in 2013, right? 23 A That's correct. 24 Q So at least as between those two, you were 25 somewhere in the 10 range, and now you're at 14.7,</p>	<p style="text-align: right;">Page 67</p> <p>1 going on at U.S. EPA and maybe a heightened -- 2 heightened focus on lead testing or on lead levels, 3 right? 4 A Changes to the lead rule, yes. 5 Q You said, I think, earlier, that there was 6 some view that any level of lead was at least 7 undesirable, right? 8 A That's what EPA has stated, yes. 9 Q Right. And you received the test results, 10 and you calculated the 90th percentile at 14.7, 11 right? 12 A Yes. 13 Q And you raised that to Towler in a verbal 14 conversation, right? 15 A Yes. 16 Q And he never gets back to you, right? 17 A I don't recall him bringing it up again, no. 18 Q Where's Towler now, do you know? Is he 19 still at Veolia? 20 A He does not work for Veolia. 21 Q Do you know where he is? 22 A I believe he's with DeKalb County in 23 Georgia. 24 Q Okay, doing what? 25 A I don't know his exact title.</p>
<p style="text-align: right;">Page 66</p> <p>1 right? 2 A That's correct. 3 Q When did you -- when did you learn of the 4 2010 90th percentile level? 5 A In the preparation for the depositions. 6 Q Okay. So prior to that, you had no 7 knowledge? 8 A I did not. 9 (Gnagy Deposition Exhibit 11 was marked 10 for identification and is attached to the 11 transcript.) 12 Q This is 11. Sir, I've shown you Exhibit 11. 13 This is the Pittsburgh Water and Sewer Authority 14 Annual Drinking Water Quality Report. Simple 15 question for you to start with. Have you ever seen 16 this document before? 17 A In the preparation for depositions, yes. 18 Q Prior to that, have you ever seen this 19 document? 20 A No, sir. 21 Q So, just so I'm -- make sure I'm clear. 22 Sometime around February of 2015, you thought to ask 23 for the 2013 lead and copper test results, right? 24 A Correct. 25 Q And the basis for that was what you knew was</p>	<p style="text-align: right;">Page 68</p> <p>1 Q When was the last time you spoke with him? 2 A Probably one of my last trips here in 3 Pittsburgh. 4 Q Okay. Do you know how long it's been since 5 he worked at Veolia? 6 A I don't recall when. What was the end of 7 our contract date, December 2015? 8 Q February 2015, I think. 9 A I don't know if he was there through 10 December or whether he left prior to that. 11 Q Okay, and other than the conversation you 12 had with Mr. Towler sometime around February 2015, 13 you didn't express your -- let me ask it this way. 14 Were you concerned in any way about the lead and 15 copper, I guess, the 90th percentile level that you 16 calculated in February 2015? 17 A I've already stated I thought it was a 18 little too close to the limits, but it was well 19 known at that time that you're either in compliance 20 or you're not. 21 Q So would you say you were concerned or not 22 because of the relatively small difference between 23 where they were and what the actual number was? 24 A I had some -- 25 MR. GALLAGHER: Object to the form.</p>

<p style="text-align: right;">Page 69</p> <p>1 Q You can answer.</p> <p>2 WITNESS: I didn't hear what you said.</p> <p>3 Q He objected to the form of the question.</p> <p>4 You can answer.</p> <p>5 A I had some concern. That's why I raised the</p> <p>6 issue to Scott Towler.</p> <p>7 Q And despite the concern that you had, you</p> <p>8 didn't mention it to Jim Good?</p> <p>9 A I did not.</p> <p>10 Q Did you have any discussions with people at</p> <p>11 the plant as to how they were dealing with corrosion</p> <p>12 control given the 2013 lead and copper test results?</p> <p>13 A I did not.</p> <p>14 Q Why not?</p> <p>15 A They know what the levels were and didn't</p> <p>16 report that there was an issue to me. All I knew is</p> <p>17 that we were in compliance.</p> <p>18 Q So you're the senior, the only, Veolia</p> <p>19 subject matter expert on this project for, at that</p> <p>20 point, almost three years, and you have a concern,</p> <p>21 and you mention it to one individual, and it dies on</p> <p>22 the vine?</p> <p>23 MR. GALLAGHER: Object to the form.</p> <p>24 Q Is that fair?</p> <p>25 A I informed one person, and I was not</p>	<p style="text-align: right;">Page 71</p> <p>1 measure of organics.</p> <p>2 Q Okay.</p> <p>3 A We did see some reduction in THM results,</p> <p>4 other than in the warmest temperature period, which</p> <p>5 would have been the third quarter.</p> <p>6 Q Okay. You say that you thought there was</p> <p>7 about an 8% reduction -- 8% difference between</p> <p>8 historical removal of organics and what occurred</p> <p>9 after the increase in ferric chloride dosage. Did I</p> <p>10 hear that correctly?</p> <p>11 A Yes.</p> <p>12 Q Do you recall about, you know, where was it</p> <p>13 historically and where was it after?</p> <p>14 A Yes, I have those numbers. Traditionally,</p> <p>15 they were averaging about 50%, somewhat less than</p> <p>16 that at times.</p> <p>17 Q Okay.</p> <p>18 A And we took it up to around 58 or 59% with</p> <p>19 the increase in ferric.</p> <p>20 Q Were you personally involved in the, sort</p> <p>21 of, analysis or the evaluation of whether the</p> <p>22 increased dosages of ferric chloride would result in</p> <p>23 increased removal of organics?</p> <p>24 A Yes.</p> <p>25 Q Okay. You did a technical memo on that?</p>
<p style="text-align: right;">Page 70</p> <p>1 notified to investigate any further.</p> <p>2 Q What was Scott Towler's background, do you</p> <p>3 know?</p> <p>4 A I do not.</p> <p>5 Q Moving to some different -- other topics</p> <p>6 here. While Veolia was working with PWSA, did</p> <p>7 Veolia recommend an increase in the dosage of ferric</p> <p>8 chloride as part of the treatment process?</p> <p>9 A Yes.</p> <p>10 Q Why?</p> <p>11 A To help reduce organics and lower the THM</p> <p>12 levels that we were experiencing in the distribution</p> <p>13 system.</p> <p>14 Q What kind of impact -- did that</p> <p>15 recommendation actually -- was it actually</p> <p>16 implemented?</p> <p>17 A Yes, it was.</p> <p>18 Q What kind of impact did the increased dosage</p> <p>19 of ferric chloride have on removal of organics and,</p> <p>20 you said, also it had some effect on THMs?</p> <p>21 A We increased the percent removal</p> <p>22 approximately 8 to 10% over historically practiced</p> <p>23 levels.</p> <p>24 Q Percent removal of organics?</p> <p>25 A Of TOC, total organic carbon, which is a</p>	<p style="text-align: right;">Page 72</p> <p>1 A I don't recall. There should be something</p> <p>2 as related to jar testing --</p> <p>3 Q Mm-hmm, okay.</p> <p>4 A -- and the results that we obtained through</p> <p>5 jar testing.</p> <p>6 Q Did you consider what impact increased</p> <p>7 dosages of ferric chloride would have on the amount</p> <p>8 of sludge produced, you know, in your analysis or</p> <p>9 your jar testing, prior to implementing the</p> <p>10 increase?</p> <p>11 A Yes. We estimated a potential increase in</p> <p>12 ferric chloride and what would happen with sludge</p> <p>13 production.</p> <p>14 Q Okay, and when it was implemented, what</p> <p>15 happened to sludge volumes or amounts? I'm not sure</p> <p>16 what the technical term is.</p> <p>17 A I don't recall. I don't have those numbers.</p> <p>18 I do know that they had a limit of sludge volume by</p> <p>19 gallons that they were allowed to send to the sewer</p> <p>20 system.</p> <p>21 Q To Alcosan?</p> <p>22 A Yes.</p> <p>23 Q And after dosages of ferric chloride were</p> <p>24 increased, did the volumes or the gallons of sludge</p> <p>25 that were sent to Alcosan, did they exceed the</p>

<p style="text-align: right;">Page 73</p> <p>1 limit?</p> <p>2 A I was told they exceeded the limit one time</p> <p>3 during a high turbidity event in the river, yes.</p> <p>4 Q Do you recall whether they exceeded that</p> <p>5 limit any other time?</p> <p>6 A I was not told that they exceeded the limit</p> <p>7 any other time, no.</p> <p>8 Q Did you -- when you were evaluating whether</p> <p>9 to increase the dosage of ferric chloride, did you</p> <p>10 consider the effect of that increased dosage on the</p> <p>11 treatment equipment that was used by PWSA?</p> <p>12 A No. The dosage wouldn't have any more or</p> <p>13 less of an effect on plant equipment. It was still</p> <p>14 the same chemical.</p> <p>15 Q You're aware that there were some issues</p> <p>16 with shear pins and bearings around the time the</p> <p>17 ferric chloride dosages were increased?</p> <p>18 A That's an incorrect assumption, sir.</p> <p>19 Q Well, I didn't make any assumptions. I just</p> <p>20 said there were issues around the time the ferric</p> <p>21 chloride was --</p> <p>22 A There were issues --</p> <p>23 Q Hold on. Let me finish my question, sorry.</p> <p>24 It's my understanding that around the time that</p> <p>25 ferric chloride dosages were increased there were</p>	<p style="text-align: right;">Page 75</p> <p>1 it with anybody else at Veolia?</p> <p>2 A I didn't discuss it with anybody, no.</p> <p>3 Q Are you aware that Veolia received -- I</p> <p>4 think they had an OpEx for sourcing of chemical?</p> <p>5 A Yes.</p> <p>6 Q And are you aware that part of that OpEx for</p> <p>7 sourcing of chemicals included ferric chloride or</p> <p>8 that ferric chloride was among the chemicals that --</p> <p>9 A It was in the list of treatment chemicals,</p> <p>10 yes.</p> <p>11 Q Do you know how much Veolia was paid on the</p> <p>12 sourcing of chemicals OpEx for ferric chloride?</p> <p>13 A I do not.</p> <p>14 Q While you were involved at PWSA, did you</p> <p>15 also recommend some changes to the way PWSA</p> <p>16 backwashed its filters?</p> <p>17 A Yes.</p> <p>18 Q What recommendations did you make?</p> <p>19 A That they were washing the filters way too</p> <p>20 long and wasting water and money and that we could</p> <p>21 achieve better performance by reducing the wash</p> <p>22 rate.</p> <p>23 Q Okay. Was that the only recommendation you</p> <p>24 made?</p> <p>25 A No. There were several things related to</p>
<p style="text-align: right;">Page 74</p> <p>1 also some issues with shear pins and bearings</p> <p>2 failing on some of the Authority's equipment,</p> <p>3 correct?</p> <p>4 A I'm not aware of that.</p> <p>5 Q Okay. What assumption did you think I was</p> <p>6 making that you thought was incorrect?</p> <p>7 A That shear pin failures were a direct</p> <p>8 correlation to the increase in feed rate, and it's</p> <p>9 not correct.</p> <p>10 Q Why do you think it's not correct?</p> <p>11 A Because they always have shear pin failures.</p> <p>12 That's what they're there for, to protect the</p> <p>13 equipment. It could be from high volumes of sludge</p> <p>14 due to high turbidity. It could be due to a number</p> <p>15 of reasons.</p> <p>16 It could be due to failure of another piece</p> <p>17 of equipment. It could be one of the paddles of the</p> <p>18 sludge collector broke a bolt and had become lodged</p> <p>19 and broke a shear pin. There's a number of cases</p> <p>20 where shear pins can be broken.</p> <p>21 Q So your view is, though there may have been</p> <p>22 some temporal correlation there, there is no</p> <p>23 causation?</p> <p>24 A I don't believe there is, no.</p> <p>25 Q Is that just your opinion or did you discuss</p>	<p style="text-align: right;">Page 76</p> <p>1 filters that we investigated and implemented during</p> <p>2 the time I was there.</p> <p>3 Q Did you recommend increasing the number of</p> <p>4 hours between backwashing while you were there?</p> <p>5 A We were investigating it --</p> <p>6 Q Okay.</p> <p>7 A -- as a possible initiative; however, DEP</p> <p>8 wanted us to do particle count testing, if they</p> <p>9 went beyond 100 hours, to prove that we could still</p> <p>10 take care of suspended solid and microbials,</p> <p>11 bacteria.</p> <p>12 Q So that was something that was, at least, a</p> <p>13 thought, but it was not implemented?</p> <p>14 A It was tabled, yes.</p> <p>15 Q Okay, and then the recommendation that was</p> <p>16 implemented or one of the recommendations that was</p> <p>17 implemented was one that just used less water to</p> <p>18 backwash each filter, right?</p> <p>19 A That's correct.</p> <p>20 Q How long had -- prior to Veolia being</p> <p>21 involved, how long was PWSA backwashing its filters</p> <p>22 for?</p> <p>23 A I don't recall exact numbers, 16 to</p> <p>24 18 minutes.</p> <p>25 Q Okay, and did you have a view as to how</p>

<p style="text-align: right;">Page 77</p> <p>1 long -- you know, how that time could be shortened?</p> <p>2 A Yes. Through some investigation and</p> <p>3 analysis of the filter beds, we determined that</p> <p>4 about six minutes was sufficient.</p> <p>5 Q Okay, and the objective here was to save</p> <p>6 money?</p> <p>7 A The objective was to get better cleaning of</p> <p>8 the filters without wasting water. They had --</p> <p>9 Q Okay.</p> <p>10 A Let me finish. They had a very small waste</p> <p>11 wash water holding tank that they had a discharge</p> <p>12 permit if it overflowed to the river. They would</p> <p>13 not hold a number of backwashes if they got into</p> <p>14 sequential backwashes.</p> <p>15 So that was another issue that we were</p> <p>16 looking at, if we could reduce the length of the</p> <p>17 backwash, we would likely not overflow that waste</p> <p>18 tank and have to go through analysis and permitting</p> <p>19 and the hassle of all of the reporting and</p> <p>20 management of that specific piece of equipment.</p> <p>21 Q Okay. So that was one objective, and</p> <p>22 another objective was also to save money, correct?</p> <p>23 You use less water, you save money?</p> <p>24 A Yes. Wash water costs money and chemicals</p> <p>25 and electricity.</p>	<p style="text-align: right;">Page 79</p> <p>1 coming through the filters also relates to giardia</p> <p>2 and the other one is crypto, which is short for</p> <p>3 cryptosporidium. Again, it's a routine operation</p> <p>4 that's something that, you know, they requested that</p> <p>5 we do, and we just never did get to it.</p> <p>6 Q Okay. Back to the ferric chloride dosage,</p> <p>7 that recommendation that it be increased. When</p> <p>8 Veolia analyzed that particular initiative, was</p> <p>9 there any consideration given to how or if increases</p> <p>10 in the amount of ferric chloride used would impact</p> <p>11 lead levels?</p> <p>12 A No. There was no analysis at that time.</p> <p>13 Q Why not?</p> <p>14 A It was used for THM control and organics</p> <p>15 reduction.</p> <p>16 Q As you sit here today, do you have any view</p> <p>17 as to whether increases in ferric chloride dosages</p> <p>18 would impact or could impact lead levels?</p> <p>19 A I know today that significant changes in</p> <p>20 coagulant type and sometimes in dosing can affect</p> <p>21 lead solubilities.</p> <p>22 Q Okay. Is that knowledge that you've</p> <p>23 gathered between when you were making the</p> <p>24 recommendation at PWSA and today?</p> <p>25 A Yes.</p>
<p style="text-align: right;">Page 78</p> <p>1 Q Right. After -- and this initiative was one</p> <p>2 that was actually implemented, correct?</p> <p>3 A That's correct.</p> <p>4 Q After this initiative was implemented, what</p> <p>5 happened to levels of turbidity in the water? Did</p> <p>6 they start to increase?</p> <p>7 A We actually saw a decrease in turbidity.</p> <p>8 Q Were there instances in which PWSA employees</p> <p>9 had to take filters out of service to backwash them</p> <p>10 with additional amounts of water?</p> <p>11 A If they did, it was not reported to me.</p> <p>12 Q Did your analysis of this particular</p> <p>13 initiative include any testing for pathogens?</p> <p>14 A It did not.</p> <p>15 Q Was that the issue that DEP had, you know,</p> <p>16 when you went to them and said, we might increase</p> <p>17 the number of hours between backwashes, and they had</p> <p>18 a concern because they weren't sure how that would</p> <p>19 affect how pathogens were filtered?</p> <p>20 A It wasn't necessarily a concern. It's a</p> <p>21 routine tool that's used. If you want to change the</p> <p>22 operation, these are some of the tests that they</p> <p>23 requested that we do to check the particle counts,</p> <p>24 because that correlates to suspended solids and</p> <p>25 turbidity, and the size of the particles that are</p>	<p style="text-align: right;">Page 80</p> <p>1 Q Okay. How did you get that knowledge?</p> <p>2 A There was an EPA report, I believe, in 2016</p> <p>3 about changes in coagulant dose and impacts on lead</p> <p>4 solubility.</p> <p>5 Q Okay, and did that report address ferric</p> <p>6 chloride specifically or did it just talk about</p> <p>7 coagulants in general?</p> <p>8 A It was more coagulants in general.</p> <p>9 Q Is that one of the assertions that has been</p> <p>10 made with respect to the issues they've faced in</p> <p>11 Flint, increases in ferric chloride may have</p> <p>12 affected lead levels?</p> <p>13 MR. GALLAGHER: Objection. I believe that's</p> <p>14 clearly outside of the scope of his designee topic,</p> <p>15 which is the water treatment plant operation and</p> <p>16 sourcing of chemicals. I'm going to instruct him</p> <p>17 not to answer any questions outside of that scope.</p> <p>18 Q Are you going to take your counsel's advice?</p> <p>19 A I don't think Flint has any bearing on this</p> <p>20 particular project, no.</p> <p>21 Q Veolia did work in Flint, correct?</p> <p>22 MR. GALLAGHER: Objection. Again, it's</p> <p>23 outside the scope of the designee topic, and I'm</p> <p>24 going to instruct the witness not to answer any</p> <p>25 questions outside of that scope.</p>

<p style="text-align: right;">Page 81</p> <p>1 MR. WEBSTER: I think I can tie it to this 2 lawsuit if you let me ask him a few preliminary 3 questions. 4 MR. GALLAGHER: Again, I think that it's 5 outside the scope of this notice, and I'm not sure 6 how it ties to the plant operations or sourcing of 7 chemicals. 8 MR. WEBSTER: So you're telling him not to 9 answer? 10 MR. GALLAGHER: Yes. 11 MR. WEBSTER: All right. For the record, 12 here are my questions, and we will, if we need to, 13 go to the arbitrator and ask him to instruct the 14 witness to answer. 15 My questions are: Veolia was involved in 16 Flint, correct? You were involved in Flint, 17 correct? And as part of Veolia's involvement in 18 Flint, one of the recommendations Veolia made was to 19 increase ferric chloride dosages, correct? 20 So those are at least the preliminary 21 questions and any follow-up that I would have would 22 depend on his answers, and for the record, I 23 disagree with the instruction not to answer, but 24 we'll not talk about that today. 25 (Gnagy Deposition Exhibit 12 was marked</p>	<p style="text-align: right;">Page 83</p> <p>1 internally and could be distributed elsewhere. 2 Q Okay. Was there a version of this that was 3 distributed beyond some internal review that you're 4 aware of? 5 A I don't recall. 6 Q The very first paragraph of the memo, second 7 sentence says, this memo describes the evaluations 8 completed and potential reductions in wash water due 9 to adjustments in filter run times and/or backwash 10 procedures based on established filter optimization 11 techniques. Did I read that correctly? 12 A Yes. 13 Q That -- those potential initiatives were 14 both OpEx initiatives that were pursued on the PWSA 15 project, right? 16 A One of them was, and one was tabled. 17 Q The backwash -- the filter run times was the 18 one that was -- well, which one was -- so I 19 understand it, which one was tabled and which one 20 was implemented? 21 A Extending filter run times was tabled 22 pending further study. The backwash initiative was 23 implemented. 24 Q Okay. 25 (Gnagy Deposition Exhibit 13 was marked</p>
<p style="text-align: right;">Page 82</p> <p>1 for identification and is attached to the 2 transcript.) 3 Q Exhibit 12. Sir, I've shown you what we've 4 marked as Exhibit 12. This appears to me to be a 5 technical memorandum that at least relates to an 6 evaluation of filtration and backwash operations for 7 PWSA that you conducted. Is that accurate? 8 A This appears to be that memo, yes. 9 Q Is this a memo that you prepared yourself? 10 A Yes. 11 Q Did anybody help you prepare this 12 memorandum? 13 A No. 14 Q Bottom left-hand corner, it says, PWSA OpEx 15 Backwash Production Memo, VVNA -- I understand 16 that's Veolia Water North America -- 17 A That's correct. 18 Q -- technical direction group. That was the 19 group you were in? 20 A That's correct. 21 Q And it says for internal use only. 22 A That's correct. 23 Q Why was this for internal use only? 24 A It was a direction we were given on a lot of 25 these technical memos until it had been reviewed</p>	<p style="text-align: right;">Page 84</p> <p>1 for identification and is attached to the 2 transcript.) 3 Q Sir, this a technical memorandum that I'm 4 assuming you prepared in March of 2013. Is that 5 correct? 6 A It appears to be, yes. 7 Q What was the purpose of this memorandum? 8 A This is a summary of the jar testing 9 evaluations and other chemical treatments that were 10 investigated to help reduce organics, or TOC, in 11 light of the THM issues that they were experiencing. 12 Q Is there an OpEx or a KPI that pertained to 13 these evaluations or that arose from these 14 evaluations? 15 A There was a treatment adjustment initiative, 16 yes. 17 Q Okay. Do you know whether that -- you 18 understand a KPI -- that there were KPIs and there 19 were OpExs on this project, right? 20 A Yes. 21 Q Did the treatment adjustments -- were they a 22 KPI or an OpEx? 23 A I don't think they were considered that. It 24 was just simple adjustments that were needed for 25 regulatory compliance.</p>

<p style="text-align: right;">Page 85</p> <p>1 Q So was this more management oversight</p> <p>2 than --</p> <p>3 A I don't know if I would call it management</p> <p>4 oversight. It was in response to the high THMs.</p> <p>5 Q So it was -- and you described this earlier</p> <p>6 as a trend that you all saw going in the wrong</p> <p>7 direction and you were trying to head it off, right?</p> <p>8 A Yes. The reports they had showed that they</p> <p>9 had operational level exceedances in the third</p> <p>10 quarter.</p> <p>11 (Gnagy Deposition Exhibit 14 was marked</p> <p>12 for identification and is attached to the</p> <p>13 transcript.)</p> <p>14 Q I'm showing you what we marked as</p> <p>15 Exhibit 14. This is another one of your technical</p> <p>16 memoranda that you prepared related to PWSA work,</p> <p>17 correct?</p> <p>18 A It appears to be, yes.</p> <p>19 Q What was the purpose of this memoranda?</p> <p>20 A This was an investigation of chlorine</p> <p>21 residual decay and prediction of water age in the</p> <p>22 distribution system that would impact chlorine</p> <p>23 residuals in the system.</p> <p>24 Q Did this relate to a potential KPI or OpEx?</p> <p>25 A I don't recall.</p>	<p style="text-align: right;">Page 87</p> <p>1 A The chlorine decay analysis was also used,</p> <p>2 like I said, to help predict water age in the</p> <p>3 system --</p> <p>4 Q Okay.</p> <p>5 A -- which was related to the THM issue. It</p> <p>6 was also related to the maintenance of chlorine</p> <p>7 residuals in the distribution system.</p> <p>8 Q The KPI/OpEx -- I'm not sure exactly how to</p> <p>9 read your August 2012 memo, but there's one at the</p> <p>10 top of Page 7 that talks about installation of high</p> <p>11 strength sodium hypochlorite generators. Do you see</p> <p>12 where I am?</p> <p>13 A Yes, yes.</p> <p>14 Q Any connection between that potential</p> <p>15 opportunity and the technical memo I just showed</p> <p>16 you?</p> <p>17 A No, they're separate.</p> <p>18 Q As a general proposition, what would cause</p> <p>19 you to prepare a technical memoranda?</p> <p>20 A That is our procedure on anything that we</p> <p>21 investigate.</p> <p>22 Q Okay.</p> <p>23 A Good or bad, we prepare a technical</p> <p>24 memorandum. If there's recommendations that come</p> <p>25 out of it, then that can be used to further the</p>
<p style="text-align: right;">Page 86</p> <p>1 Q Okay. Go back to your initial due diligence</p> <p>2 memo, please. This is the August 2012 memo. Do you</p> <p>3 have that? I think it's Exhibit 2.</p> <p>4 A I have it.</p> <p>5 Q And starting on Page 6, you list some</p> <p>6 technical opportunities that are identified either</p> <p>7 as a KPI or an OpEx, correct?</p> <p>8 A Correct.</p> <p>9 Q Do any of the technical opportunities listed</p> <p>10 in this section of your memo relate to the issue</p> <p>11 that is the subject of your April 2013 technical</p> <p>12 memo, Exhibit 14?</p> <p>13 A The chlorine residual decay is not included</p> <p>14 in this list, but this is an initial list, and the</p> <p>15 lists were evolving throughout the project.</p> <p>16 Q Okay. What would the benefit, either the</p> <p>17 savings realized or the revenue generated, what</p> <p>18 would have resulted from any, you know, initiative</p> <p>19 that arose out of this technical memo?</p> <p>20 A Out of the chlorine residual decay memo?</p> <p>21 Q Yeah.</p> <p>22 A I don't think there would be any financial</p> <p>23 opportunities. There would be efficiency</p> <p>24 opportunities.</p> <p>25 Q Okay.</p>	<p style="text-align: right;">Page 88</p> <p>1 implementation of the recommendations.</p> <p>2 Q Got ya.</p> <p>3 A Could I take a restroom break very quickly?</p> <p>4 Q You can.</p> <p>5 (A recess was taken.)</p> <p>6 (Gnagy Deposition Exhibits 15 through 19</p> <p>7 were marked for identification and are attached</p> <p>8 to the transcript.)</p> <p>9 Q Sir, I'm showing you what we've marked as</p> <p>10 Exhibits 15 through 19. Exhibit 15 is a technical</p> <p>11 memoranda, June 2013, I believe, correct?</p> <p>12 A It appears to be, yes.</p> <p>13 Q What was the purpose of this technical</p> <p>14 memoranda?</p> <p>15 A Looking at evaluation of the existing</p> <p>16 storage tanks and water residence time as it related</p> <p>17 to THM formation.</p> <p>18 Q Did this pertain to any potential KPI or</p> <p>19 OpEx?</p> <p>20 A It was initially thought that it might.</p> <p>21 However, during the training for implementation of</p> <p>22 the treatment strategy with the staff, they noticed</p> <p>23 that I had some incorrect information in the ferric</p> <p>24 costs, and those were later adjusted showing that</p> <p>25 there was no cost savings.</p>

<p style="text-align: right;">Page 89</p> <p>1 Q So here, last page of this memo, there's</p> <p>2 proposed cost savings of about \$343,000, right?</p> <p>3 A That's what it says, there, yes.</p> <p>4 Q And then later on you realized that those</p> <p>5 savings -- however you calculated that, you missed</p> <p>6 some information and there actually weren't the</p> <p>7 savings?</p> <p>8 A I had been given incorrect information by</p> <p>9 the PWSA staff, and we later found the error and</p> <p>10 corrected it.</p> <p>11 Q Got ya. Next Exhibit 16, November 2013</p> <p>12 technical memo, correct?</p> <p>13 A Yes, it appears to be.</p> <p>14 Q What's the subject matter here?</p> <p>15 A This was a request from PWSA to take a look</p> <p>16 at one filter that was giving them operating</p> <p>17 difficulties.</p> <p>18 Q Okay.</p> <p>19 A We investigated it. It had a buildup of</p> <p>20 manganese in the media, and it was acid-cleaned to</p> <p>21 remove the excess manganese and put back into</p> <p>22 service, and it very quickly then came back to</p> <p>23 normal operation.</p> <p>24 Q Any KPI or OpEx associated with this memo?</p> <p>25 A No.</p>	<p style="text-align: right;">Page 91</p> <p>1 A Yes.</p> <p>2 Q Any OpEx or KPI associated with this issue?</p> <p>3 A No. This was an investigation of different</p> <p>4 coagulants from a chemical supplier that PWSA asked</p> <p>5 me to evaluate for them.</p> <p>6 Q Last question. What was the status of the</p> <p>7 lime system at PWSA when you first became involved</p> <p>8 in August of 2012?</p> <p>9 A I'm not sure what you're asking.</p> <p>10 Q All right. Let me see if I can ask it in a</p> <p>11 better way.</p> <p>12 How was lime fed into the -- or how was lime</p> <p>13 fed into the treatment process when you started in</p> <p>14 2012, do you know?</p> <p>15 A Yes. Lime was routed to -- excuse me, was</p> <p>16 routed to one of the rapid mix chambers.</p> <p>17 Q What was the condition of the equipment at</p> <p>18 the time you started in 2012?</p> <p>19 A I don't recall in 2012. I later looked at</p> <p>20 some issues that they were having.</p> <p>21 Q Was there an OpEx or at least a potential</p> <p>22 OpEx to switch from, I guess, a granular form of</p> <p>23 lime to liquid lime?</p> <p>24 A It wasn't an OpEx. There were some</p> <p>25 investigations on whether it would work or not.</p>
<p style="text-align: right;">Page 90</p> <p>1 Q Exhibit 17, a December 2013 technical memo,</p> <p>2 correct?</p> <p>3 A It appears to be, yes.</p> <p>4 Q What is the general subject matter of this</p> <p>5 memo?</p> <p>6 A This is some of the investigation as to the</p> <p>7 operational evaluation level exceedances based on</p> <p>8 more data collection and what possibly could be</p> <p>9 leading to some of those issues.</p> <p>10 Q Any OpEx or KPI associated with this issue?</p> <p>11 A No. This is just technical support for the</p> <p>12 project.</p> <p>13 Q Exhibit 18. This is an April 2014 memo.</p> <p>14 Looks like it relates to an investigation on</p> <p>15 alternative -- how do you pronounce that?</p> <p>16 A Algaecides.</p> <p>17 Q Algaecides, all right. Does this pertain to</p> <p>18 a KPI or OpEx?</p> <p>19 A I believe this one did result in some cost</p> <p>20 savings.</p> <p>21 Q Okay, Exhibit 19. This is a May 2015</p> <p>22 technical memo. First line says that you conducted</p> <p>23 some bench scale testing of three ferric</p> <p>24 chloride/polymer blended coagulants. Do you see</p> <p>25 that?</p>	<p style="text-align: right;">Page 92</p> <p>1 Q What caused those investigations? You know,</p> <p>2 why were you investigating that issue? Was it an</p> <p>3 equipment issue or was it something else?</p> <p>4 A I received a question from the staff -- I</p> <p>5 believe it was Paprocki and Lijewski -- if there</p> <p>6 were any other lime products out there that would be</p> <p>7 easier to feed, and I disclosed to them, yes, liquid</p> <p>8 lime is an option; however, it should be</p> <p>9 investigated, and, you know, it may or may not have</p> <p>10 any cost savings, but it would be easier to feed</p> <p>11 because it's simply a liquid chemical. You don't</p> <p>12 have to mix it with water.</p> <p>13 Q I could ask you many more questions, but I</p> <p>14 think my time is up.</p> <p>15 (At 11:40 a.m., the deposition was</p> <p>16 concluded.)</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>

1 CERTIFICATE OF COURT REPORTER - NOTARY PUBLIC

2 I, Amelia Bowlen, Registered Diplomate Reporter
3 and Certified Realtime Reporter, the officer before
4 whom the foregoing deposition was taken, do hereby
5 certify that the foregoing transcript is a true and
6 correct record of the testimony given; that said
7 testimony was taken by me stenographically and
8 thereafter reduced to typewriting under my
9 direction; that reading and signing was not
10 requested; and that I am neither counsel for or
11 related to, nor employed by any of the parties to
12 this case and have interest, financial or otherwise,
13 in its outcome.

14 IN WITNESS WHEREOF, I have hereunto set my hand
15 and affixed my notarial seal this 7th day of
16 December, 2017.
17 My commission expires July 19, 2020.

18

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21

22 _____
23 AMELIA BOWLEN, RDR, CRR

24 NOTARY PUBLIC IN AND FOR

25 THE COMMONWEALTH OF PENNSYLVANIA